



Robert Greene Sterne / Edward J. Kessler Jorge A. Goldstein David K.S. Cornwell Robert W. Esmond Tracy-Gene G. Durkin Michael B. Ray Robert E. Sokohl Eric K. Steffe Michael Q. Lee Steven R. Ludwig John M. Covert Linda E. Alcom Robert C. Millonig Lawrence B. Bugaisky Donald J. Featherstone Michael V. Messinger Judith U. Kim Timothy J. Shea, Jr. Patrick E. Garrett Jeffrey T. Helvey Heidi L. Kraus Albert L. Ferro\* Dönald R. Banowit Peter A. Jackman Teresa U. Medler Jeffrey S. Weaver Kendrick P. Patterson Vincent L. Capuano Eldora Ellison Floyd Thomas C. Fiala Brian J. Del Buono Virgil Lee Beaston Theodore A. Wood Elizabeth J. Haanes Joseph S. Ostroff Frank R. Cottingham Christine M. Lhuller Rae Lynn P. Guest George S. Bardmesser Daniel A. Kleim Jason D. Eisenberg Michael D. Specht Andrea J. Kamage Tracy L. Muller Jon E. Wright LuArne M. DeSantis Ann E. Summerfield Aric W. Ledford\* Helene C. Carlson Timothy A. Doyle' Gaby L. Longsworth Lori A. Gordon\*

Nic Ter Jyc Lar Mi Re Ka Na Ma Aa Ka Bn

Nicole D. Dretar Ted J. Ebersole Jyoti C. Iyer\* Laura A. Vogel Michael J. Mancuso

Registered Patent Agents Karen R. Markowicz
Nancy J. Leith
Matthew J. Dowd
Aaron L. Schwartz
Katrina Yujian Pei Quach
Bryan L. Skefton
Robert A. Schwartzman
Teresa A. Colella
Jeffrey S. Lundgren
Victoria S. Rutherford
Michalla K. Holochak

Robert H. DeSelms Simon J. Elliott Julie A. Heider Mita Mukherjee Scott M. Woodhouse Michael G. Penn Christopher J. Walsh

<u>Of Counsel</u> Kenneth C. Bass III Evan R. Smith Marvin C. Guthrie

\*Admitted only in Maryland \*Admitted only in Virginia •Practice Limited to Federal Agencies

December 29, 2004

WRITER'S DIRECT NUMBER: (202) 772-8587 INTERNET ADDRESS: PGARRETT@SKGF.COM

Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

Re:

U.S. Utility Patent Application

Application No. 10/719,058; Filed: November 24, 2003

For: Methods, Systems, and Computer Program Products for Parallel

**Correlation and Applications Thereof** 

Inventors:

Rawlins et al.

Our Ref:

1744.1380000

Sir:

Transmitted herewith for appropriate action are the following documents:

- 1. Information Disclosure Statement;
- 2. Sixty-Four (64) sheets of Form PTO-1449 listing nine hundred fifty-seven (957) documents;
- 3. Two (2) Compact Discs labeled *IDS References Disc 1* and *IDS References Disc 2*; and
- 4. One (1) return postcard.

It is respectfully requested that the attached postcard be stamped with the date of filing of these documents, and that it be returned to our courier. In the event that extensions of time are

Sterne, Kessler, Goldstein & Fox PLLC.: 1100 New York Avenue, NW: Washington, DC 20005: 202.371.2600 f 202.371.2540: www.skgf.com

Commissioner for Patents December 29, 2004 Page 2

necessary to prevent abandonment of this patent application, then such extensions of time are hereby petitioned.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Patrick E. Garrett

Attorney for Applicants Registration No. 39,987

PEG/mlb Enclosures 349118\_1.DOC



# THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Rawlins et al.

Appl. No.: 10/719,058

Filed: November 24, 2003

For:

Methods, Systems, and Computer Program Products for Parallel

**Correlation and Applications** 

Thereof

Confirmation No.: 9124

Art Unit: 2124

Examiner: (to be assigned)

Atty. Docket: 1744.1380000

# **Information Disclosure Statement**

Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

Sir:

Listed on accompanying Form PTO-1449 are documents that may be considered material to the examination of this application, in compliance with the duty of disclosure requirements of 37 C.F.R. §§ 1.56, 1.97 and 1.98.

In addition to providing hard copies of the documents as required by applicable rules (see boxes 7 and 8 below), Applicants herewith provide two Compact Discs labeled "Disc 1" and "Disc 2" having stored thereon searchable electronic copies (in PDF format) of the documents listed on the PTO-1449. More specifically, "Disc 1" contains electronic copies of documents AA1-AR1, AA2-AR2, AA3-AR3, AA4-AR4, AA5-AR5, AA6-AR6, AA7-AR7, AA8-AR8, AA9-AR9, AA10-AL10, AN10-AR10, AA11-AI11, AN11-AR11, AA12-AI12, AN12-AR12, AA13-AI13, AN13-AR13, AA14-AI14, AN14-AR14, AA15-AI15, AN15-AR15, AA16-AI16, AN16-AR16, AA17-AI17, AN17-AR17, AA18-AI18, AN18-AR18, AA19-AI19, AN19-AR19, AA20-AI20, AN20-AR20, AA21-AI21, AN21-AR21, AA22-AI22, AN22-AR22, AA23-AI23, AN23-AR23, AA24-AI24, AN24-AR24, AA25-AI25, AN25-AR25, AA26-AI26, AN26-AR26, AA27-AI27, AN27-

AR27, AA28-AI28, AN28-AR28, AA29-AI29, AN29-AR29, AA30-AI30, AN30-AR30, AA31-AI31, AN31-AR31, AA32-AI32, AN32-AR32, AA33-AI33, AN33-AR33, AA34-AI34, AN34-AR34, AA35-AI35, AN35-AR35, AA36-AI36, AN36-AR36, AA37-AI37, AN37-AR37, AA38-AI38, AN38-AR38, AA39-AI39, AN40-AR40, AN41-AR41, AN42-AR42, AN43-AR43, AN44-AR44, AN45-AR45, AN46-AR46, AN47-AR47, AN48-AR48, AN49-AR49, AN50, and AO50; and "Disc 2" contains electronic copies of documents AM10, AJ11-AM11, AJ12-AM12, AJ13-AM13, AJ14-AM14, AJ15-AM15, AJ16-AM16, AJ17-AM17, AJ18-AM18, AJ19-AM19, AJ20-AM20, AJ21-AM21, AJ22-AM22, AJ23-AL23, AA40-AI40, AA41-AI41, AA42-AI42, AA43-AI43, AA44-AI44, AA45-AI45, AA46-AI46, AA47-AI47, AA48-AI48, AA49-AI49, AA50-AI50, AP50-AR50, AA51-AI51, AN51-AR51, AA52-AI52, AN52-AR52, AA53-AI53, AN53-AR53, AA54-AI54, AN54-AR54, AA55-AI55, AN55-AR55, AA56-AI56, AN56-AR56, AA57-AI57, AN57-AR57, AA58-AI58, AN58-AR58, AA59-AI59, AN59-AP59, AA60-AI60, AA61-AI61, AA62-AI62, AA63-AI63, and AA64-AG64. The file names on the CDs correspond to the identifiers on the PTO-1449. It is noted that the CDs are being provided in addition to hard copies of the documents (as required by applicable rules) for the convenience of the Examiner.

Applicants have listed publication dates on the attached PTO-1449 based on information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated.

Applicants reserve the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may

not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

Applicants provide the following comments regarding the documents:

Documents AD1, AL1, AO1, AC2, AF2, AG2, AI2, AC5, AG5, AB6, AF7, AI7, AB8, AF8, AG9, AK9, AO9, AO11, AA12, AE14, AN14, AB15, AE15, AH15, AO15, AF16, AD18, AG18, AB20, AC20, AQ20, AA22, AH22, AI23, AC24, AF26, AC30, AH31, AC32, AA33, AR33, AH34, AP35 and AO48 were included with Petitions to Make Special pleadings in co-owned related U.S. Patent Nos. 6,061,551, 6,061,555, 6,049,706 and 6,091,940.

Documents AJ1, AL9, AJ10, AA19, AC25, AB30 and AF32 were cited in search reports in the corresponding foreign applications of the above-referenced co-owned related patents.

Documents AM4, AH6, AL7, AJ9, AM9, AC17, AA20, AG20, AG21, AA24, AD24, AG24, AI31, AA32, AG34, AD36 and AQ37 were cited in searches performed at Applicants' request by the European Patent Office's Searching Authority in the above-referenced co-owned related patents.

Documents AH5, AH17, AD21, AB34, AE34, AB36, AI36 and AI38 were cited by the Examiners in the above-referenced co-owned related patents.

Documents AP6-AR6 and AN7-AP7 are copies of Declarations (including Exhibits) made by Messrs. Bultman, Cook, Holtz, Looke, Moses, Parker, and Sorrells, filed in the above-referenced co-owned related patents.

Documents AA6, AD6, AO6, AE7, AE8, AA11, AE11, AH11, AI12, AB13, AD13, AH13, AC14, AG14, AE16, AB17, AF19, AD20, AN21, AG23, AH27, AI27,

AI28, AH29, AG30, AD37, AR40, AO49 and AQ49 were suggested or identified by potential licensees.

Documents AR21, AN22-AR22, AN23-AR23, AN24-AR24, AN25-AR25, AN26-AR26, AN27-AR27, AN28-AR28, AN29-AR29, AN30-AR30, AN31-AR31, AN32-AR32 and AN33-AP33 are press releases issued by assignee ParkerVision, Inc.

Documents AA1, AB1, AD1-AG1, AA2, AH21, AD44, and AD59-AF59 were cited by an Examiner in related U.S. Patent Application No. 09/569,044, filed May 10, 2000, entitled "Universal Platform Module and Methods and Apparatuses Relating Thereto Enabled by Universal Frequency Translation Technology," directed to related subject matter.

Documents AJ1, AK9-AM9, AG28, AB30, AA32, AN52 and AP55 were cited by an Examiner in related European Patent Application No. 99954905.8, filed October 18, 1999, entitled "Integrated Frequency Translation and Selectivity with a Variety of Filter Embodiments," directed to related subject matter.

Documents AI7, AJ9, AK9, AG20, AG21, AB30 and AI43 were cited in a written opinion in related PCT Application No. PCT/US00/23923, filed October 18, 1999, entitled "Applications of Frequency Translation," directed to related subject matter.

Documents AI7, AE34, AA46, and AB48 were cited by an Examiner in related U.S. Patent Application No. 09/293,580, filed April 16, 1999, entitled "Method and System for Frequency Up-Conversion with a Variety of Transmitted Configurations," directed to related subject matter.

Documents AK9, AM9, AE15, AL19, AM19, AB46 and AA50 were cited in a search report in related PCT Application No. PCT/US01/08969, filed March 22, 2001, entitled, "Integrated Frequency Translation and Selectivity with a Gain Control Functionality, and Applications Thereof," directed to related subject matter.

Documents AK9, AE15, AK22-AM22, AA27, AC32, AE45, AI51, AA52, and AQ58 were cited in a search report in related PCT Application No. PCT/US01/15555, filed May 16, 2001, entitled, "Apparatus, System, and Method for Down-Converting and Up-Converting Electromagnetic Signals," directed to related subject matter.

Documents AK9, AC17, AD36 and AD40 were cited in a search report in related PCT Application No. PCT/US00/21359, filed August 4, 2000, entitled "Wireless Local Area Network (WLAN) Using Universal Frequency Translation Technology," directed to related subject matter.

Documents AJ10, AH17, AG28, AH34, AD44-AI44, and AA45-AD45 were cited by an Examiner in related U.S. Patent Application No. 09/261,129, filed March 3, 1999, entitled "Applications of Universal Frequency Translation," directed to related subject matter.

Documents AM10, AJ11, AK11 and AE40 were cited in a communication issued by the International Preliminary Examination Authority in related PCT Application No. PCT/US00/01108, filed January 19, 2000, entitled "Frequency Translation and Embodiments Thereof Such as the Family Radio Service," directed to related subject matter.

Documents AL11, AM11, AA44, and AQ50 were cited in a communication issued by the International Searching Authority in related PCT Application No.

PCT/US00/09911, filed April 14, 2000, entitled "Method And System For Down-converting an Electromagnetic Signal, And Transforms For Same," directed to related subject matter.

Documents AJ12, AK12, AE45, and AF45 were cited in a search report in related PCT Application No. PCT/US00/27555, filed October 6, 2000, entitled "DC Offset, Re-radiation, and I/Q Solutions Using Universal Frequency Translation Technology," directed to related subject matter.

Documents AL12, AM12, AG45, and AH45 were cited in a search report in related PCT Application No. PCT/US00/34771, filed January 21, 2000, entitled "Phase Comparator Using Undersampling," directed to related subject matter.

Documents AJ13-AL13, AI45, and AB46 were cited in a search report issued in related PCT Application No. PCT/US00/27281, filed October 4, 2000, entitled "Frequency Converter and Method," directed to related subject matter.

Documents AL13, AM18, AJ19, and AI45 were cited in a search report in related PCT Application No. PCT/US00/31659, filed November 20, 2000, entitled "Phase Shifting Applications of Universal Frequency Translation," directed to related subject matter.

Documents AM13, AJ14, AK14, AM21, AJ22 and AQ51 were cited by an Examiner in related Japanese Patent Application No. 2000-577,765, filed June 21, 2000, entitled "Method and System for Ensuring Reception of a Communications Signal," directed to related subject matter.

Documents AL14, AM14, AJ15 and AK15 were cited by an Examiner in related Japanese Patent Application No. 2000-577,761, filed June 20, 2000, entitled "Method and System for Frequency Up-conversion," directed to related subject matter.

Documents AL15, AM15, AJ16-AM16, AJ17-AM17, AJ20, and AK23 were cited by an Examiner in related Japanese Patent Application No. 2000-577,764, filed June 21, 2000, entitled "Applications of Frequency Translation," directed to related subject matter.

Documents AJ18-AL18, AB47, AC47, AE47-AG47, AB48, and AC49 were cited by an Examiner in related U.S. Patent Application No. 09/489,675, filed January 24, 2000, entitled "Bar Code Scanner Using Universal Frequency Translation Technology for Up-Conversion and Down-Conversion," directed to related subject matter.

Documents AK19 and AF48 were cited in a search report in related PCT Application No. PCT/US01/15111, filed October 5, 2001, entitled "Method and Apparatuses Relating to a Universal Platform Module and Enabled by Universal Frequency Translation Technology," directed to related subject matter.

Documents AK20, AL20, AJ21, AK21, AL21, AE42, AP56 and AQ56 were cited in a search report in related PCT Application No. PCT/US01/12086, filed April 13, 2001, entitled, "Frequency Converter," directed to related subject matter.

Documents AI23, AB30, and AB60-AE60 were cited by an Examiner in related U.S. Patent Application No. 09/569,045, filed May 10, 2000, entitled "Methods and Apparatuses Relating to a Universal Platform Module and Enabled by Universal Frequency Translation Technology," directed to related subject matter.

Document AI23 and AD46 were cited by an Examiner in related U.S. Patent Application No. 09/293,095, filed April 16, 1999, entitled "Method and System for Down-Converting an Electromagnetic Signal Having Optimized Switch Structures," directed to related subject matter.

Documents AI23, AH50, AB55, AI59, and AA60 were cited by an Examiner in related U.S. Patent Application No. 09/525,185, filed March 14, 2000, entitled "Spread Spectrum Applications of Universal Frequency Translation Technology," directed to related subject matter.

Documents AI23 and AF60-AH60 were cited by an Examiner in related U.S. Patent Application No. 09/590,955, filed June 9, 2000, entitled "Phase-Shifting Applications of Universal Frequency Translation," directed to related subject matter.

Documents AJ23 and AB52 were cited in an Invitation to Pay Additional Fees in PCT Application No. PCT/US01/43077, filed November 14, 2001, entitled "Method and Apparatus for a Parallel Correlator and Applications Thereof," directed to related subject matter.

Documents AL23, AH47, AB49, AG51, AF56-AH56, AO59, and AE61 were cited by an Examiner in related U.S. Patent Application No. 09/669,634, filed September 26, 2000, entitled "High Frequency Translator and Method of High Frequency Translation," directed to related subject matter.

Documents AC24, AD47, AA48, and AB50 were cited by an Examiner in related U.S. Patent Application No. 09/376,509, filed August 18, 1999, entitled "Method and System for Ensuring Reception of a Communications Signal," directed to related subject matter.

Documents AD35, AB44, AC44, AE46-AI46, and AA47 were cited by an Examiner in parent U.S. Patent Application No. 09/293,342, filed April 16, 1999, entitled "Method and System for Down-Converting Electromagnetic Signals Including Resonant Structures for Enhanced Energy Transfer," directed to related subject matter.

Documents AA38 and AG48 were cited by an Examiner in related U.S. Patent Application No. 09/476,091, filed January 3, 2000, entitled "Image-Reject Down-Converter and Embodiments Thereof, Such as the Family Radio Service," directed to related subject matter.

Documents AI43, AH47 and AH48 were cited by an Examiner in related U.S. Patent Application No. 09/293,283, filed April 16, 1999, entitled "Integrated Frequency Translation and Selectivity with a Variety of Filter Embodiments," directed to related subject matter.

Documents AC46 and AA48 were cited by an Examiner in related U.S. Patent Application No. 09/670,831, filed September 28, 2000, entitled "Universal Frequency Translation, Embodiments Thereof, and a Web Site and Web Pages Directed to Same," directed to related subject matter.

Documents AH47, AI47, AA48-AE48, AB49, AF51, AG51, AC52, AG54, AF55, AC56, AD56, AI56, AA57, AD64, and AE64 are co-owned patents which are directed to related subject matter.

Documents AI47, AH50, AF55, AC56, AD56, AI56, AA57, and AH59 were cited by an Examiner in related U.S. Patent Application No. 09/838,387, filed April 20, 2001, entitled "Method and System for Down-Converting and Up-Converting an Electromagnetic Signal, and Transforms for Same," directed to related subject matter.

Documents AB48, AD48, AH54, AI54, and AA55-AC55 were cited by an Examiner in related U.S. Patent Application No. 09/548,923, filed April 13, 2000, entitled "Method and System for Frequency Conversion with Modulation Embodiments," directed to related subject matter.

Documents AB48, AE48, AD56, AI56, AG651, and AH61 were cited by an Examiner in related U.S. Patent Application No. 09/525,615, filed March 14, 2000, entitled "Method, System, and Apparatus for Balanced Frequency Up-conversion of a Baseband Signal," directed to related subject matter.

Documents AI48, AA49, and AF50 were cited by an Examiner in related U.S. Patent Application No. 09/567,963, filed May 10, 2000, entitled "Frequency Synthesizer Using Universal Frequency Translation Technology," directed to related subject matter.

Documents AD49-AI49 and AE51 were cited by an Examiner in related U.S. Patent Application No. 09/476,092, filed January 3, 2000, entitled "Analog Zero IF FM Decoder and Embodiments Thereof, Such as the Family Radio Service," directed to related subject matter.

Documents AI49, AH50, AI50, AA51, AB51, AI62, AA63, and AB63 were cited by an Examiner in related U.S. Patent Application No. 09/632,857, filed August 4, 2000, entitled "Wireless Local Area Network (WLAN) Technology and Applications Including Techniques of Universal Frequency Translation," directed to related subject matter.

Documents AC50-AE50, AG50, AI50 and AC51 were cited by an Examiner in related U.S. Patent Application No. 09/476,330, filed January 3, 2000, entitled, "Multi-Mode, Multi-Band Communication System," directed to related subject matter.

Documents AH50, AA51 and AB51 were cited in by an Examiner in related U.S. Patent Application No. 09/526,041, filed March 14, 2000, entitled, "DC Offset, Re-radiation, and I/Q Solutions Using Universal Frequency Translation Technology," directed to related subject matter.

Documents AH50, AC53-AI53, and AF61 were cited by an Examiner in related U.S. Patent Application No. 09/476,093, filed January 3, 2000, entitled "Family Radio System with Multi-Mode and Multi-Band Functionality," directed to related subject matter.

Documents AH50 and AB57-AE57 were cited by an Examiner in related U.S. Patent Application No. 09/567,978, filed May 10, 2000, entitled "Carrier and Clock Recovery Using Universal Frequency Translation," directed to related subject matter.

Documents AH51, AB56, AE56, AN58-AP58, AN59, AP59, and AG63 were cited by an Examiner in related U.S. Patent Application No. 09/567,977, filed May 10, 2000, entitled "Optical Down-converter Using Universal Frequency Translation Technology," directed to related subject matter.

Documents AA52, AF52, AI52, and AG59 were cited by an Examiner in related U.S. Patent Application No. 10/289,377, filed November 7, 2002, entitled "Method and Apparatus for Reducing DC Offsets in a Communication System," directed to related subject matter.

Documents AD52-AG52 and AC63-AF63 were cited by an Examiner in related U.S. Patent Application No. 09/986,764, filed November 9, 2001, entitled "Method and Apparatus for Reducing DC Offsets in a Communication System," directed to related subject matter.

Documents AA52, AE52, AH52, AI52, AA53, and AB53 were cited in a search report in related PCT Application No. PCT/US02/35861, filed November 8, 2002, entitled "Method and Apparatus for Reducing DC Offsets in a Communication System," directed to related subject matter.

Documents AA54-AD54 were cited in a search report in a related PCT Application No. PCT/US03/16403, filed May 27, 2003, entitled "Method and Apparatus for DC Offset Removal in a Radio Frequency Communication Channel," directed to related subject matter.

Documents AB54, AI61, AA62, and AB62 were cited in a Written Opinion in related PCT Application No. PCT/US03/16403, filed May 27, 2003, entitled "Method and Apparatus for DC Offset Removal in a Radio Frequency Communication Channel," directed to related subject matter.

Documents AB54, AI61, and AA62-AH62 were cited by an Examiner in related U.S. Patent Application No. 10/290,323, filed November 8, 2002, entitled "Method and Apparatus for DC Offset Removal in a Radio Frequency Communication Channel," directed to related subject matter.

Documents AE54, AF54, AI60, AA61, and AB61 were cited by an Examiner in related U.S. Patent Application No. 09/550,642, filed April 14, 2000, entitled "Method and System for Down-converting an Electromagnetic Signal, and Transforms for Same," directed to related subject matter.

Documents AD55 and AE55 were cited by an Examiner in related U.S. Patent Application No. 09/543,867, filed April 5, 2000, entitled "Automated Meter Reader Applications of Universal Frequency Translation," directed to related subject matter.

Documents AG55 and AH55 were cited by an Examiner in related U.S. Patent Application No. 10/317,181, filed December 12, 2002, entitled "Differential Frequency Down-Conversion Using Techniques of Universal Frequency Translation Technology," directed to related subject matter.

Documents AI55, AA56, AC61, and AD61 were cited by an Examiner in related U.S. Patent Application No. 10/317,165, filed December 12, 2002, entitled "Method and Apparatus for Reducing DC Offsets in Communication Systems Using Universal Frequency Translation Technology," directed to related subject matter.

Documents AF57 and AG57 were cited by an Examiner in related U.S. Patent Application No. 10/330,219, filed December 30, 2002, entitled "Methods and Systems for Down-Converting Electromagnetic Signals, and Applications Thereof," directed to related subject matter.

Documents AH57, AI57, AA58-AI58, and AA59 were cited by an Examiner in related U.S. Patent Application No. 09/566,188, filed May 5, 2000, entitled "Integrated Frequency Translation and Selectivity with Gain Control Functionality, and Applications Thereof," directed to related subject matter.

Documents AB59 and AC59 were cited by an Examiner in related U.S. Patent Application No. 09/632,856, filed August 4, 2000, entitled "Wireless Local Area Network (WLAN) Using Universal Frequency Translation Technology Including Multi-Phase Embodiments and Circuit Implementation," directed to related subject matter.

Documents AH63, AI63, AA64, and AB64 were cited by an Examiner in parent U.S. Patent Application No. 09/987,193, filed November 13, 2001, entitled "Method and

Apparatus for a Parallel Correlator and Applications Thereof," directed to related subject matter.

Document AC64 was cited by an Examiner in related U.S. Patent Application No. 09/632,857, filed August 4, 2000, entitled "Wireless Local Area Network (WLAN) Technology and Applications Including Techniques of Universal Frequency Translation," directed to related subject matter.

Documents AF64 and AG64 were cited by an Examiner in related U.S. Patent Application No. 10/289,377, filed November 7, 2002, entitled "Method and Apparatus for Reducing DC Offsets in A Communication System," directed to related subject matter.

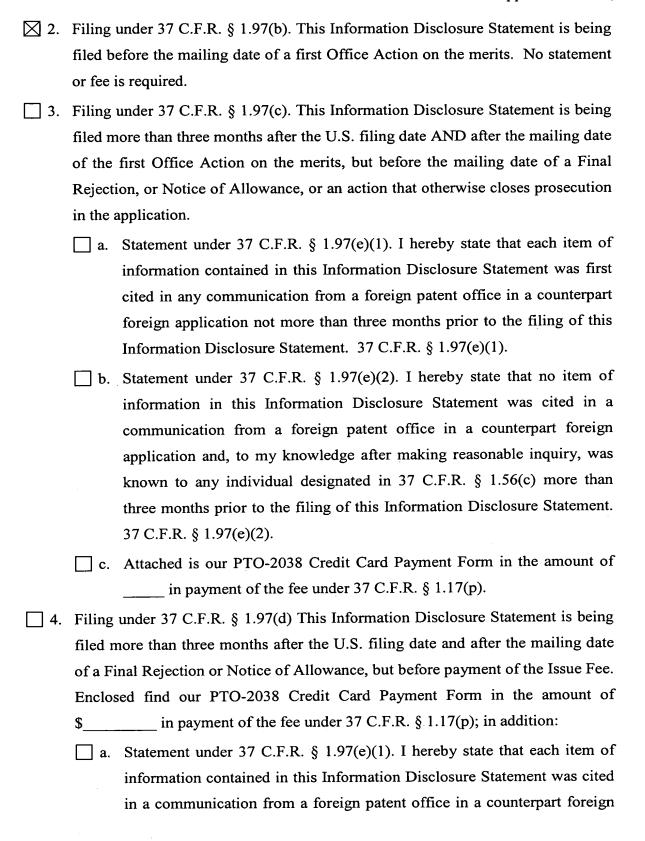
The other documents in the PTO-1449 do not fall within the above categories.

It is noted that some of these documents could be classified in more than one of the above categories.

This statement should not be construed as a representation that information more material to the examination of the present patent application does not exist. The Examiner is specifically requested not to rely solely on the material submitted herewith.

Applicants have checked the appropriate boxes below.

☐ 1. Statement under 37 C.F.R. 1.704(d). Each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application and this communication was not received by any individual designated in 37 C.F.R. 
§ 1.56(c) more than thirty days prior to the filing of this information disclosure statement.



application not more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(1).

- b. Statement under 37 C.F.R. § 1.97(e)(2). I hereby state that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(2).
- 5. The document(s) was/were cited in a search report by a foreign patent office in a counterpart foreign application. Submission of an English language version of the search report that indicates the degree of relevance found by the foreign office is provided in satisfaction of the requirement for a concise explanation of relevance. 1138 OG 37, 38.

Document AJ1 (DE 42 37 692 C1) appears to be a receiver for a digital radio signal. Document AJ1 is a counterpart German application of document AG28, which is in the English language.

Document AK1 (EP 0 035 166 A1) appears to describe a digitized receiver. An English language abstract of document AK1 is enclosed as document AQ8.

Document AJ6 (EP 0 785 635 A1) appears to describe a method and apparatus for frequency diversity transmission using a plurality of uncorrelated carriers. An English language abstract of document AJ6 is enclosed as document AP8.

Document AK7 (FR 2 743 231 A1) is the corresponding French application of document AJ6 (EP 0 785 635 A1), which is described above.

Document AJ8 (JP 2-39632) appears to describe a transmitter for frequency diversity. An English language abstract of document AJ8 is enclosed as document AO8.

Document AK8 (JP 2-131629) appears to describe a transmitter-receiver for frequency diversity. An English language abstract of document AK8 is enclosed as document AN8.

Document AL8 (JP 2-276351) appears to describe an FSK demodulating circuit. An English language abstract of document AL8 is enclosed as document AR7.

Document AK11 (FR 2245130) appears to describe a converter. A partial English language translation of document AK11 is enclosed as document AP50.

Document AL11 (DE 3541031) appears to describe a method and device for demodulating high-frequency modulated signals. An English language translation of document AL11 is enclosed as document AR50.

Document AM11 (EP 0 732 803) appears to describe a procedure and device for demodulation by sampling. An English translation of document AM11 is enclosed as document AN51.

Document AJ12 (DE 19735798) appears to describe a transceiver. An English translation of document AJ12 is enclosed as document AP51.

Document AM13 (JP 56-114451) appears to describe a system for diversity radio transmission. Document AM13 is a counterpart Japanese application of document AF8, which is in the English language.

Document AJ14 (JP 8-32556) appears to describe a data transmitter-receiver. An English language abstract of document AJ14 is enclosed as document AO52.

Document AK14 (JP 8-139524) appears to describe a frequency converting circuit and radio communication device. An English language abstract of document AK14 is enclosed as document AP52.

Document AL14 (JP 59-144249) appears to describe a pulse signal transmission system. An English language abstract of document AL14 is enclosed as document AQ52.

Document AM14 (JP 63-54002) appears to describe a microwave burst signal generator which incorporates a FET frequency multiplier. An English language abstract of document AM14 is enclosed as document AR52.

Document AJ15 (JP 6-237276) appears to describe a quadrature modulator. An English language abstract of document AJ15 is enclosed as document AN53.

Document AK15 (JP 8-23359) appears to describe a digital quadrature modulation device. An English language abstract of document AK15 is enclosed as document AO53.

Document AL15 (JP 47-2314) appears to describe a demodulator. An English language translation of document AL15 is enclosed as document AP53.

Document AM15 (JP 58-7903) appears to describe a switched capacitor modulator. A partial English language translation of document AM15 is enclosed as document AQ53.

Document AJ16 (JP 58-133004) appears to describe an amplitude detector. An English language abstract of document AJ16 is enclosed as document AR53.

Document AK16 (JP 60-58705) appears to describe a frequency converting circuit. An English language abstract of document AK16 is enclosed as document AN54.

Document AL16 (JP 4-123614) appears to describe a level converting circuit. An English language abstract of document AL16 is enclosed as document AO54.

Document AM16 (JP 4-127601) appears to describe a frequency conversion circuit. An English language abstract of document AM16 is enclosed as document AP54.

Document AJ17 (JP 5-175730) appears to describe a time division direct receiver. An English language abstract of document AJ17 is enclosed as document AQ54.

Document AK17 (JP 5-175734) appears to describe an FM demodulator. An English language abstract of document AK17 is enclosed as document AR54.

Document AL17 (JP 7-154344) appears to describe a receiver for receiving modulated carrier signals and an IQ mixer/demodulator using it's receiving

constitution. An English language abstract of document AL17 is enclosed as document AN55.

Document AM17 (JP 7-307620) appears to describe a bottom detection circuit. An English language abstract of document AM17 is enclosed as document AO55.

Document AJ18 (JP 55-66057) appears to describe a bar-code detection circuit. An English language abstract of document AJ18 is enclosed as document AQ55.

Document AK18 (JP 63-65587) appears to describe a wireless light pen device. An English language abstract of document AK18 is enclosed as document AR55.

Document AL18 (JP 63-153691) appears to describe a data transfer for a semiconductor data carrier system. An English language abstract of document AL18 is enclosed as document AN56.

Document AJ20 (JP 60-130203) appears to describe a frequency converter. An English language abstract of document AJ20 is enclosed as document AO56.

Document AK20 (DE 196 27 640 A1) appears to describe a mixer. Document AK20 is a counterpart German application of document AA33, which is in the English language.

Document AL20 (EP 0 087 336 A1) appears to describe a transistorized mixer for microwave transmitters. The granted version of document AL20 is cited as document AM20 (EP 0 087 336 B1) and contains an English language version of the claims.

Document AK21 (FR 2 669 787 A1) appears to describe a symmetrical super high frequency mixer. An English language abstract of document AK21 is enclosed as document AR56.

Document AM21 (JP 61-30821) appears to describe a squelch device. An English language abstract of document AL21 is enclosed as document AP57.

Document AJ22 (JP 5-327356) appears to describe a frequency converter. An English language abstract of document AJ22 is enclosed as document AQ57.

Document AK23 (JP 9-36664) appears to describe a frequency conversion circuit. An English language abstract of document AK23 is enclosed as document AR58.

Document AL23 (DE 196 48 915 A1) appears to describe a process of frequency conversion. An English language translation of document AL23 is enclosed as document AO59.

Document AQ50 (Fest et al.) appears to discuss analog-digital converters. An English language translation of document AQ50 is enclosed as document AO51.

Document AQ51 (Miki et al.) appears to describe modulation systems. A partial English language translation of document AQ51 is enclosed as document AR51.

- ☑ 7. In accordance with 37 C.F.R. § 1.98(a)(2), copies of U.S. patents and patent application publications cited on the attached Form PTO-1449 are not enclosed.
- With the exception of documents AAE64, AF64, and AG64, copies of the documents were cited by or submitted to the Office in an IDS that complies with 37 C.F.R. 

  § 1.98(a)-(c) in Application No. 09/987,193, filed November 13, 2001, which is relied upon for an earlier filing date under 35 U.S.C. 

  § 120. Thus, copies of the documents are not attached. 37 C.F.R. 

  § 1.98(d).
- ∑ 9. It is expected that the examiner will review the prosecution and cited art in the parent application no. 09/987,193, filed November 13, 2001, in accordance with MPEP 2001.06(b), and indicate in the next communication from the office that the art cited in the earlier prosecution history has been reviewed in connection with the present application.

It is respectfully requested that the Examiner initial and return a copy of the enclosed PTO-1449, and indicate in the official file wrapper of this patent application that the documents have been considered.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Patrick E. Garrett Attorney for Applicants Registration No. 39,987

Date: 12/29/04

1100 New York Avenue, N.W. Washington, D.C. 20005-3934 (202) 371-2600

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TION DISCLOSURE STATEMENT

APPLICATION NO. ATTY. DOCKET NO. 1744.1380000 10/719,058 FIRST NAMED INVENTOR Gregory S. Rawlins GROUP FILING DATE

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EXAMINER INITIAL			UMENT IBER	DATI	E	NAM	E		CLASS	SUB- CLASS	FILING DATE		
	AA1	2,05	7,613	10/19	936	Gardner							
	AB1	2,24	1,078	05/19	941	Vree	and						
	AC1	2,270	0,385	01/19	942	Skillman							
	AD1	2,28	3,575	05/19	42 Roberts								
	AE1	2,35	8,152	09/19	944	Earp							
	AF1	2,410	0,350	10/19	/1946		et al.		<u> </u>				
111	AG1	2,45	1,430	10/19	948	Baro	ne				•		
	AH1	2,46	462,069     02/19       462,181     02/19		949	Chat	terjea <i>et al.</i>	_					
	Al1	2,46			949	Gros	selfinger			<u> </u>			
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	AJ1	DE 4	2 37 692 C1		03/1994		DE				No		
	AK1	EP 0	035 166 A1	09/1981		EP				.No			
	AL1	EP 0	0 193 899 B1		06/1990		EP				N/A		
	AM1	EP 0	380 351 A2		08/1990		EP				N/A		
			ОТНІ	ER (In	cluding Aut	hor, T	itle, Date, Pertinent Pag	jes, e	tc.)				
	AN	1	Aghvami, H. Fourth Intern 153 (October	ationa	l Conference	e Sate e on Sa	lites Using the Highly Elli atellite Systems for Mobile	iptic C	Orbits- The Unmunications	K T-SAT Mo	bile Payload," tion, IEE, pp. 147-		
	AO	1	Akers, N.P. 6 49 (January		RF Sampling	g Gate	s: a Brief Review," <i>IEE P</i>	rocee	dings, IEE, \	/ol. 133, Parl	A, No. 1, pp. 45-		
	AP	1	Al-Ahmad, H.A.M. et al., "Doppler Frequency Correction for a Non-Geostationary Communications Satellite.  Techniques for CERS and T-SAT," Electronics Division Colloquium on Low Noise Oscillators and Synthesizers, IEE, pp. 4/1-4/5 (January 23, 1986).										
	AQ	1	Ali, I. et al., "Doppler Characterization for LEO Satellites," <i>IEEE Transactions on Communications</i> , IEEE, Vol. 46, No. 3, pp. 309-313 (March 1998).										
	AR 1 Allan, D.W., "Statistics of Atomic Frequency Standards," <i>Proceedings Of The IEEE Special Issue on Frequency Stability</i> , IEEE, pp. 221-230 (February 1966).												
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## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.

1744.1380000

FIRST NAMED INVENTOR
Gregory S. Rawlins

FILING DATE

APPLICATION NO.

10/719,058

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A	A2	2,472	2,798	06/19	949	Fred	endall				<u>]</u> .			
A	B2	2,497	7,859	02/19	950	Boughtwood et al.								
A <sup>t</sup>	C2	2,499	9,279	02/19	02/1950		rson							
A	D2	2,802	2,208	05/1961 02/1962										
A	E2	2,98	5,875											
A	F2	3,023	3,309			Foul	kes			<del></del>	ļ			
A	.G2	<del>                                     </del>	9,679				eney <i>et al.</i>				.,			
	H2	<del></del>	4,393	09/19		<u>-</u>	elman				1			
A	.12	3,114	4,106	12/19	963	McN	lanus				<u> </u>			
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EXAMINER INITIAL		DOCUMENT NUMBER			DATE		COUNTRY		CLASS	SUB- CLASS	TRANSLATION			
A	J2	EP 0 380 351 A3		02/1991		EP				N/A				
A	K2	EP 0	EP 0 411 840 A2		02/1991		EP				N/A			
A	L2	EP 0	EP 0 411 840 A3		07/1991		EP				N/A			
A	M2	EP 0 411 840 B1			10/1995		EP				N/A			
		<del></del>	ОТНЕ	R (In	cluding Autl	hor, T	itle, Date, Pertinent Pag	es, etc	;.)					
AN	N	2	Allstot, D.J. e SC-13, No. 6				pacitor Ladder Filters," <i>IE</i> r 1978).	EEE Jou	urnal of Sol	id-State Circ	uits, IEEE, Vol.			
AC	0	<u>2</u>	Allstot, D.J. a Filtering Syst	nd Bla ems,"	ack Jr. W.C., Proceedings	"Tecl	nnological Design Conside e <i>IEEE</i> , IEEE, Vol. 71, No	erations	s for Monol . 967-986 ( <i>i</i>	ithic MOS Sv August 1983)	vitched-Capacitor ,.			
AF	Р	2		Alouini, M. et al., "Channel Characterization and Modeling for Ka-Band Very Small Aperture Terminals," Proceedings Of the IEEE, IEEE, Vol. 85, No. 6, pp. 981-997 (June 1997).										
AC	Ω	2	Propagation i	ndreyev, G.A. and Ogarev, S.A., "Phase Distortions of Keyed Millimeter-Wave Signals in the Case of ropagation in a Turbulent Atmosphere," <i>Telecommunications and Radio Engineering</i> , Scripta Technica, Vol. 3, No. 12, pp. 87-90 (December 1988).										
AF	R	<u>2</u>	Antonetti, A. <i>et al.</i> , "Optoelectronic Sampling in the Picosecond Range," <i>Optics Communications</i> , North-Holland Publishing Company, Vol. 21, No. 2, pp. 211-214 (May 1977).											
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## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO. APPLICATION NO. 1744.1380000 10/719,058

FIRST NAMED INVENTOR Gregory S. Rawlins

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	AA3	3,11	8,117	01/19	964	King	et al.				
	AB3	3,22	6,643_	12/19	965	McN	air				
	AC3	3,25	8,694	06/19	966	Sher	oherd				
	AD3	3,38	3,598	05/19	968	Sanders					
	AE3	3,38	4,822	05/19	68 Miyagi						
	AF3	1	4,718	07/1969 08/1970		_	eault			<del>-</del>	<b>.</b>
	AG3		3,291			Pierr					
	AH3	_	8,342	+	12/1970		ey 			+	<del> </del>
	AI3	3,55	5,428	01/19		•	eault	L	-		<u> </u>
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	AJ3	EP 0	) 423 718 A2	04/1991		EP				N/A	
	AK3	EP 0	) 423 718 A3	423 718 A3			EP				N/A
	AL3	EP (	) 486 095 A1		05/1992		EP				N/A
*	АМЗ	EP (	O 486 095 B1		02/1997		EP				N/A
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	AN	3	Austin, J. et European M 1988).	al., "Do	oppler Corrected Conference	ction c	of the Telecommunication crowave Exhibitions and F	Payload Publishers	Oscillato Ltd., pp	ors in the UK o. 851-857 (S	T-SAT," <i>18<sup>th</sup></i> eptember 12 - 15,
	AO	<u>3</u>					onic switching and gating b. 101-103 (February 1, 19		" Applie	d Physics Le	tters, American
	АР	<u>3</u>	Baher, H., "I	ransfe s, IEEE	r Functions t	for Sw d Syste	ritched-Capacitor and Wav ems Society, Vol. CAS-33	/e Digital , No. 11,	Filters," pp. 1138	IEEE Transa 8-1142 (Nove	octions on Circuits mber 1986).
	AQ	3	Baines, R., " (May 1995).	The D	SP Bottlened	ck," <i>IEi</i>	EE Communications Maga	azine, IEE	EE Comr	nunications S	Society, pp. 46-54
	AR	<u>3</u>					or Probabilities on Earth-S 7, pp. 296-297 (March 28,		, ks Subje	ct to Scintilla	tion Fading,"
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INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO. APPLICATION NO. 1744.1380000 10/719,058

FIRST NAMED INVENTOR Gregory S. Rawlins

FILING DATE GROUP November 24, 2003 GROUP To Be Assigned

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EXAMINER INITIAL			CUMENT IBER	DATI	Ē	NAM	E	CLASS	SUB- CLASS	FILING DATE		
	AA4	3,61	7,892	11/19	971	Hawley et al.						
	AB4	3,62	1,402	11/19	971	Gard	ner					
	AC4	3,62	3,160	11/19	971	Giles	et al.					
	AD4	3,62	6,417	12/19	971	Gilbe	ert					
	AE4	3,62	9,696	12/19	971	Bartelink			<u> </u>			
	AF4	3,66	2,268	05/1972 09/1972		Gans	et al.		$\perp$			
	AG4	3,68	9,841			Bello	et al.					
	AH4	3,71	4,577	973	Haye	s						
	Al4	3,71	7,844	02/19	973	Barre	et et al.					
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EXAMINER INITIAL		DOC	CUMENT NUM	BER	DATE		COUNTRY	CLASS	SUB- CLASS	TRANSLATION		
	AJ4	EP (	EP 0 512 748 A2		11/1992		EP			N/A		
-	AK4	EP (	512 748 A3	07/1993		EP			N/A			
**- *	AL4	EP (	512 748 B1	11/1998		EP			N/A			
	AM4	EP (	) 548 542 A1	06/1993		EP			N/A			
			ОТН	ER (In	cluding Aut	hor, T	itle, Date, Pertinent Pages	, etc.)				
	AN	4	Banjo, O.P. and Vilar, E., "The Dependence of Slant Path Amplitude Scintillations on Various Meteorological Parameters," Fifth International Conference on Antennas and Propagation (ICAP 87) Part 2: Propagation, 15 pp. 277-280 (March 30 - April 2, 1987).									
	AO	4	Paths and Im	ipact c	n Communic	cation	nt and Modeling of Amplitud Systems," <i>IEEE Transaction</i> 780 (August 1986).	de Scintillations ns on Communi	on Low-Elev cations, IEEE	ation Earth-Space E Communications		
	AP	4	Banjo, O.P. et al., "Tropospheric Amplitude Spectra Due to Absorption and Scattering in Earth-Space Paths,"  Fourth International Conference on Antennas and Propagation (ICAP 85), IEE, pp. 77-82 (April 16-19, 1985).									
	AQ	4	Basili,P. et al., "Case Study of Intense Scintillation Events on the OTS Path," IEEE Transactions on Antennas and Propagation, IEEE, Vol. 38, No. 1, pp. 107-113 (January 1990).									
	AR	4					C <sup>2</sup> and Turbulent Path Lengt I-1116 (August 18, 1988).	th on OTS Spac	ce-Earth Link	," Electronics		
EXAMINER		1	<u> </u>				,	DATE CON	SIDERED			
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APPLICATION NO. ATTY. DOCKET NO. 10/719,058 1744.1380000 FORM PTO-1449 FIRST NAMED INVENTOR Gregory S. Rawlins INFORMATION DISCLOSURE STATEMENT GROUP FILING DATE To Be Assigned November 24, 2003 U.S. PATENT DOCUMENTS **EXAMINER** FILING DATE SUB-**CLASS** NAME DATE INITIAL **DOCUMENT CLASS** NUMBER Tomsa et al. 05/1973 AA5 3,735,048 Thompson 04/1974 AB5 3,806,811 MacAfee 02/1975 AC5 3,868,601 Sadler 04/1976 AD5 3,949,300 06/1976 Batz 3,967,202 AE5 **Bickford** 09/1976 AF5 3,980,945 10/1976 Bauer 3,987,280 AG5 11/1976 Hirata AH5 3,991,277 Snijders et al. 01/1977 AI5 4,003,002 FOREIGN PATENT DOCUMENTS **EXAMINER TRANSLATION** CLASS SUB-DATE COUNTRY DOCUMENT NUMBER INITIAL **CLASS** N/A EP 01/1995 EP 0 632 288 A2 AJ5 N/A FΡ 07/1996 EP 0 632 288 A3 AK5 N/A 02/1996 EP EP 0 696 854 A1 AL5 N/A 07/1997 FP EP 0 782 275 A2 AM5 OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Blakey, J.R. et al., "Measurement of Atmospheric Millimetre-Wave Phase Scintillations in an Absorption Region," Electronics Letters, IEE, Vol. 21, No. 11, pp. 486-487 (May 23, 1985). AN <u>5</u>. Burgueño, A. et al., "Influence of rain gauge integration time on the rain rate statistics used in microwave communications," annales des tèlècommunications, International Union of Radio Science, pp. 522-527 AO <u>5</u> (September/October 1988). Burgueño, A. et al., "Long-Term Joint Statistical Analysis of Duration and Intensity of Rainfall Rate with Application to Microwave Communications," Fifth International Conference on Antennas and Propagation (ICAP) AP <u>5</u> 87) Part 2: Propagation, IEE, pp. 198-201 (March 30 - April 2, 1987). Burgueño, A. et al., "Long Term Statistics of Precipitation Rate Return Periods in the Context of Microwave Communications," Sixth International Conference on Antennas and Propagation (ICAP 89) Part 2: Propagation, AQ <u>5</u> IEE, pp. 297-301 (April 4-7, 1989). Burgueño, A. et al., "Spectral Analysis of 49 Years of Rainfall Rate and Relation to Fade Dynamics," IEEE Transactions on Communications, IEEE Communications Society, Vol. 38, No. 9, pp. 1359-1366 (September AR <u>5</u> 1990). DATE CONSIDERED **EXAMINER EXAMINER**: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

#### Page 6 of 64 ATTY. DOCKET NO. APPLICATION NO. 1744.1380000 10/719,058 FORM PTO-1449 FIRST NAMED INVENTOR Gregory S. Rawlins INFORMATION DISCLOSURE STATEMENT FILING DATE GROUP To Be Assigned November 24, 2003 **U.S. PATENT DOCUMENTS EXAMINER** INITIAL DOCUMENT DATE NAME CLASS SUB-FILING DATE CLASS NUMBER AA6 4,013,966 03/1977 Campbell AB6 4,019,140 04/1977 Swerdlow

Lohrmann

Campbell

Young

07/1977

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AC6

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AE6

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	•		OTHER (Including Author, Title, Date, Pertinent Pages, etc.)
	AN	<u>6</u>	Catalan, C. and Vilar, E., "Approach for satellite slant path remote sensing," <i>Electronics Letters</i> , IEE, Vol. 34, No. 12, pp. 1238-1240 (June 11, 1998).
	AO	<u>6</u>	Chan, P. et al., "A Highly Linear 1-GHz CMOS Downconversion Mixer," <i>European Solid State Circuits Conference</i> , IEEE Communication Society, pp. 210-213 (September 22-24, 1993).
•	AP	<u>6</u>	Copy of Declaration of Michael J. Bultman filed in patent application Ser. No. 09/176,022, which is directed to related subject matter, 2 pages.
	AQ	<u>6</u>	Copy of Declaration of Robert W. Cook filed in patent application Ser. No. 09/176,022, which is directed to related subject matter, 2 pages.
	AR	<u>6</u>	Copy of Declaration of Alex Holtz filed in patent application Ser. No. 09/176,022, which is directed to related subject matter, 3 pages.

EXAMINER DATE CONSIDERED

# INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.

1744.1380000

FIRST NAMED INVENTOR
Gregory S. Rawlins

FILING DATE

APPLICATION NO.

10/719,058

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	AA7	4,14	2,155	02/19	979	Adachi							
	AB7	4,17	0,764	10/19	979	Salz et al.			<u> </u>				
	AC7	4,20	4,171	05/19	980	Sutphin, Jr.							
	AD7	4,21	0,872	07/19	07/1980		Gregorian						
	AE7	4,24	5,355	01/19	981	Pascoe et al.							
	AF7	4,25	3,066	02/1981 02/1981		Fish	ner et al.						
	AG7	4,25	3,069			Nos	sek						
	AH7	4,30	8,614	12/19	12/1981		ner et al.						
	AI7	4,32	0,361	03/1	982	Kik	kert						
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	AJ7	EP 0 874 499 A2		10/1998		EP				N/A			
	AK7	FR 2	R 2 743 231 A1		07/1997		FR				No		
	AL7	GB 2	3 2 161 344 A		01/1986		GB				N/A		
	AM7	GB 2	2 215 945 A	09/1989		GB				N/A			
			ОТН	ER (In	cluding Auti	hor, '	Title, Date, Pertinent Pa	ages, e	tc.)		•		
	AN	7	Copy of Dec related subje				oke filed in patent applic	cation S	Ser. No. 09/1	76,022, which	n is directed to		
	AO	<u>7</u>	Copy of Dec related subje				oses, Jr. filed in patent a	pplicati	on Ser. No.	09/176,022, v	which is directed to		
	AP	<u>7</u>	Copy of Declaration of Jeffrey L. Parker and David F. Sorrells, with attachment Exhibit 1, filed in patent application Ser. No. 09/176,022, which is directed to related subject matter, 130 pages.										
	AQ	Z	Dewey, R.J. and Collier, C.J., "Multi-Mode Radio Receiver," <i>Electronics Division Colloquium on Digitally Implemented Radios</i> , IEE, pp. 3/1-3/5 (October 18, 1985).										
	AR	DIALOG File 347 (JAPIO) English Language Patent Abstract for JP 2-276351, 1 page (November 13, 1990 - Date of publication of application).											
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ATTY. DOCKET NO. 1744.1380000 10/719,058

FIRST NAMED INVENTOR Gregory S. Rawlins

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	AA8	4,32	0,536	03/19	982	Dietr	ich							
	AB8			08/19	982	Gordy								
<u>.</u>	AC8	4.35	5,401	10/19	982	Ikoma et al.								
<u> </u>	AD8			10/19	982	Owe	n <i>et al.</i>							
	AE8	_	i i	11/19	982	Gond	da	Ì		<u> </u>				
	AF8			12/19	982	Collin	า							
	AG8		<del></del>	12/19	982	Berg	er et al.							
	AH8			983	1	ind <i>et al.</i>								
	AI8	$\overline{}$		06/1983		Stein				1				
	10	1 1,00	5,070	00, 10		٠	ENT DOCUMENTS				<del></del>			
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	AJ8	JP 2	-39632		02/1990		JP				No			
	AK8	JP 2	-131629	05/1990		JP				No				
	AL8	JP 2	-276351	11/1990		JP	-			No				
	AM8	wo	80/01633 A1	08/1980		РСТ				N/A				
	•	<u>'</u>	OTHE	R (Inc	cluding Aut	thor. T	itle, Date, Pertinent Pa	ages, etc	.)					
	AN	8	DIALOG File 3 publication of a			ish Lar	nguage Patent Abstract	for JP 2-	131629, 1	page (May 2	1, 1990 - Date of			
	AO	8	DIALOG File 3 publication of a	47 (J	JAPIO) Engl cation).	ish Lar	nguage Patent Abstract	for JP 2-	39632, 1 p	age (Februar	ry 8, 1990 - Date of			
	AP	8	DIALOG File 3 (December 26	DIALOG File 348 (European Patents) English Language Patent Abstract for EP 0 785 635 A1, 3 pages December 26, 1996 - Date of publication of application).										
	AQ	8	DIALOG File 3 18, 1981 - Date	DIALOG File 348 (European Patents) English Language Patent Abstract for EP 35166 A1, 2 pages (February 18, 1981 - Date of publication of application).										
	AR	8	"DSO takes sa 77 and 79 (Ma	mplii rch 1	ng rate to 1 987).	Ghz," <i>l</i>	Electronic Engineering,	Morgan (	Grampian F	Publishers, V	ol. 59, No. 723, pp.			
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ATTY. DOCKET NO.

1744.1380000

FIRST NAMED INVENTOR
Gregory S. Rawlins

FILING DATE

APPLICATION NO.

10/719,058

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	AA9	4,39	2,255	07/19	983	Del Giudice							
	AB9	4,430	0,629	02/19	984 Betzl et al.								
	AC9	4,44	6,438	05/19	984	Chang et al.							
	AD9	4,45	6,990	06/19	984	Fishe	er et al.						
	AE9	4,47	2,785	09/19	984	Kasu	iga						
	AF9	4,47	9,226	90 11/1984		Prabhu et al.							
	AG9	4.48	1,490			Hunt	ley						
	AH9	+	1,642			Hans	son			<u> </u>			
	AI9	<del></del>			11/1984		Houdart						
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EXAMINER INITIAL		DOC	CUMENT NUME	BER	DATE		COUNTRY		CLASS	SUB- CLASS	TRANSLATION		
<u>-</u>	AJ9	AJ9 WO 94/05087 A1					РСТ				N/A		
····	AK9	wo	96/02977 A1	02/1996		PCT				N/A			
	AL9	wo	O 96/08078 A1		03/1996		PCT				N/A		
	AM9	wo	96/39750 A1	12/1996		PCT				N/A			
			OTHE	R (In	cluding Aut	thor, T	itle, Date, Pertinent Pa	ages, e	tc.)				
	AN	9	Erdi, G. and H Ratio," <i>IEEE</i> v	denne Journa	use, P.R., "/ al of Solid-S	A Prec tate Ci	ision FET-Less Sample rcuits, IEEE, Vol. SC-13	-and-H∈ 3, No. 6	old with High i, pp. 864-87	ı Charge-to-E 3 (December	Proop Current 1978).		
·	AO	9	Faulkner, N.D Oscillators," // (March 1983)	EEE 7	Vilar, E., "S Transactions	ubharr s on Ins	nonic Sampling for the strumentation and Meas	Measur s <i>uremei</i>	rement of Sh nt, IEEE, Vol	ort Term Stal . IM-32, No.	bility of Microwave 1, pp. 208-213		
	AP	9	Faulkner, N.D. et al., "Sub-Harmonic Sampling for the Accurate Measurement of Frequency Stability of Microwave Oscillators," CPEM 82 Digest: Conference on Precision Electromagnetic Measurements, IEEE, pp. M-10 and M-11 (1982).										
	Faulkner, N.D. and Vilar, E., "Time Domain Analysis of Frequency Stability Using Non-Zero Dead-Time Counter Techniques," CPEM 84 Digest Conference on Precision Electromagnetic Measurements, IEEE, pp. 81-82 (1984).												
	Filip, M. and Vilar, E., "Optimum Utilization of the Channel Capacity of a Satellite Link in the Presence of Amplitude Scintillations and Rain Attenuation," <i>IEEE Transactions on Communications</i> , IEEE Communications Society, Vol. 38, No. 11, pp. 1958-1965 (November 1990).												
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APPLICATION NO. ATTY. DOCKET NO. 10/719,058 1744.1380000 FIRST NAMED INVENTOR FORM PTO-1449 Gregory S. Rawlins INFORMATION DISCLOSURE STATEMENT GROUP FILING DATE To Be Assigned November 24, 2003 U.S. PATENT DOCUMENTS FILING DATE SUB-CLASS **EXAMINER** NAME DATE CLASS DOCUMENT INITIAL NUMBER Lee et al. 03/1985 4,504,803 **AA10** Mukaiyama 05/1985 AB10 4,517,519 Ogawa 05/1985 4,517,520 AC10 van Roermund 05/1985 4,518,935 AD10 Vance et al. 06/1985 4,521,892 AE10 Dixon, Jr. et al. 07/1986 AF10 4,563,773 Reed 03/1986 4,577,157 AG10 Vance 04/1986 4,583,239 AH10 Hirao et al. 05/1986 4,591,736 AI10 FOREIGN PATENT DOCUMENTS TRANSLATION SUB-CLASS **EXAMINER** COUNTRY CLASS DATE DOCUMENT NUMBER INITIAL N/A PCT 10/1997 WO 97/38490 A1 AJ10 N/A PCT 01/1998 WO 98/00953 A1 AK10 N/A PCT 06/1998 WO 98/24201 A1 AL10 N/A FP 01/1984 EP 0 099 265 A1 AM10 OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Fukahori, K., "A CMOS Narrow-Band Signaling Filter with Q Reduction," IEEE Journal of Solid-State Circuits, IEEE, Vol. SC-19, No. 6, pp. 926-932 (December 1984). ΑN <u>10</u> Fukuchi, H. and Otsu, Y., "Available time statistics of rain attenuation on earth-space path," IEE Proceedings-H: Microwaves, Antennas and Propagation, IEE, Vol. 135, Pt. H, No. 6, pp. 387-390 (December 1988). <u>10</u> ΑO Gibbins, C.J. and Chadha, R., "Millimetre-wave propagation through hydrocarbon flame," IEE Proceedings, IEE, Vol. 134, Pt. H, No.2, pp. 169-173 (April 1987). <u>10</u> ΑP Gilchrist, B. et al., "Sampling hikes performance of frequency synthesizers," Microwaves & RF, Hayden Publishing, Vol. 23, No. 1, pp. 93-94 and 110 (January 1984). 10 AQ Gossard, E.E., "Clear weather meteorological effects on propagation at frequencies above 1 Ghz," Radio Science, American Geophysical Union, Vol. 16, No. 5, pp. 589-608 (September - October 1981). <u>10</u> AR DATE CONSIDERED **EXAMINER EXAMINER**: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO. APPLICATION NO. 1744.1380000 10/719,058

FIRST NAMED INVENTOR Gregory S. Rawlins

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	AA11	+	2,220	07/19	986	Kurihara							
	AB11	4,60	3,300	07/19	986	We	lles, II et al.						
-	AC11	4,61	2,464	09/19	986	Ishikawa et al. Gans et al.							
	AD11	4,61	2,518	09/19	986								
	AE11	4,61	6,191	10/19	986	Gal	ani <i>et al</i> .						
	AF11	4,62	1,217	11/19	986	Sax	ce et al.						
	AG11	4,62	8,517	986	Sch	nwarz et al.							
	AH11	4,63	4,998	01/19	987	Cra	wford						
_	Al11	4,64	8,021	03/19	987	Alb	erkrack						
					FOREIGN	PA'	TENT DOCUMENTS				1		
EXAMINER INITIAL		DOC	CUMENT NUM	BER	DATE		COUNTRY		CLA	ss	SUB- CLASS	TRANSLATION	
	AJ11	EP 0 560 228 A1		09/1993		EP					N/A		
	AK11	FR 2	FR 2 245 130		04/1975		FR					Yes (See AP50)	
	AL11	DE 3	DE 35 41 031 A1		05/1986		DE					Yes (See AR50)	
	AM11	EP (	732 803 A1	09/1996		EP					Yes (See AN51)		
			ОТНІ	ER (In	cluding Autl	hor,	Title, Date, Pertinent Pag	ges, etc	:.)				
	AN	<u>11</u>	Gregorian, R 941-966 (Aug			Capa	citor Circuit Design," <i>Proc</i>	eedings	s of th	ne IEEE	F, IEEE, Vol.	71, No. 8, pp.	
	AO	<u>11</u>	Groshong et 67-68, 70, 73				chniques Simplify Digital F 91).	Radio," <i>E</i>	Electr	ronic De	esign, Pento	n Publishing, pp.	
	АР	<u>11</u>	Grove, W.M. Microwave T	, "Sam heory	pling for Osc and Techniqu	illos ues,	copes and Other RF Syste IEEE, pp. 629-635 (Decer	ems: Dc mber 19	: thro 66).	ugh X-E	Band," <i>IEEE</i>	Transactions on	
	AQ	<u>11</u>		addon, J. et al., "Measurement of Microwave Scintillations on a Satellite Down-Link at X-Band," Antennas and ropagation, IEE, pp. 113-117 (1981).									
	Haddon, J. and Vilar, E., "Scattering Induced Microwave Scintillations from Clear Air and Rain on Earth Space Paths and the Influence of Antenna Aperture," <i>IEEE Transactions on Antennas and Propagation</i> , IEEE, Vol. AP-34, No. 5, pp. 646-657 (May 1986).												
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ATTY. DOCKET NO. APPLICATION NO. 1744.1380000 10/719,058

FIRST NAMED INVENTOR Gregory S. Rawlins

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	AA12	+	1,034	03/19					_	<del>                                     </del>	<del> </del>			
	AB12	+	5,882	06/19		Lillie et al.				<del> </del>				
•	AC12	+	8,253	08/19		Gum	<del></del>				<u> </u>			
	AD12	+ -	6,376	12/19		Daug	<del></del>			1	<u> </u>			
	AE12	+	6,388	12/19		Jaco		-+		+				
	AF12	1	8,113	01/19	<del></del>	+	er et al.		<del></del>	<del></del>	-			
	AG12	+	6,041	02/19		Proh	aska <i>et al</i> .				<del> </del>			
	AH12	+	3,403	03/1988		Simo	one							
	Al12	4,73	4,591	988	Ichits	subo								
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	AJ12	DE 1	97 35 798 C1		07/1998	·	DE				Yes (See AP51			
	AK12	wo	98/40968 A2&	A3	09/1998		PCT				N/A			
	AL12	EP 0	529 836 A1	03/1993		EP				N/A				
	AM12	EP 0	795 955 A2&	43	09/1997		EP				N/A			
			отні	R (In	cluding Aut	thor, T	itle, Date, Pertinent Pag	es, etc.)						
	AN	<u>12</u>	Hafdallah, H. 4, 1988).	et al.,	"2-4 Ghz M	IESFE <sup>-</sup>	T Sampler," Electronics Le	etters, IEI	E, Vol. 2	4, No. 3, pp.	151-153 (February			
	AO	<u>12</u>					ase Scintillation Measurer 7, pp. 287-289 (April 1, 19		8-2 km l	ine-Of-Sight	Path at 30 Ghz,"			
	AP	<u>12</u>	Hewitt, A. et al., "An 18 Ghz Wideband LOS Multipath Experiment," International Conference on Measurements for Telecommunication Transmission Systems - MTTS 85, IEE, pp. 112-116 (November 27-28, 1985)											
	AQ	<u>12</u>	Measuremen	Hewitt, A. et al., "An Autoregressive Approach to the Identification of Multipath Ray Parameters from Field Measurements," IEEE Transactions on Communications, IEEE Communications Society, Vol. 37, No. 11, pp. 1136-1143 (November 1989).										
	Hewitt, A. and Vilar, E., "Selective fading on LOS Microwave Links: Classical and Spread-Spectrum Measurement Techniques," <i>IEEE Transactions on Communications</i> , IEEE Communications Society, Vol. 36, No. 7, pp. 789-796 (July 1988).													
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APPLICATION NO. ATTY. DOCKET NO. 10/719,058 1744.1380000 FIRST NAMED INVENTOR FORM PTO-1449 Gregory S. Rawlins INFORMATION DISCLOSURE STATEMENT GROUP FILING DATE To Be Assigned November 24, 2003 U.S. PATENT DOCUMENTS FILING DATE **CLASS** SUB-**EXAMINER** NAME DATE DOCUMENT **CLASS** INITIAL NUMBER Steel et al. 04/1988 4,737,969 AA13 Everard 05/1988 4,743,858 **AB13** Lu 05/1988 4,745,463 AC13 Agoston 4,751,468 06/1988 AD13 Zink 07/1988 4,757,538 AE13 Marshall 08/1988 4,768,187 AF13 Tamakoshi et al. 09/1988 AG13 4,769,612 Janc et al. 11/1988 4,785,463 **AH13** Greivenkamp, Jr. 12/1988 4,791,584 AI13 FOREIGN PATENT DOCUMENTS TRANSLATION SUB-COUNTRY CLASS **EXAMINER** DOCUMENT NUMBER DATE CLASS INITIAL N/A EP 01/1998 EP 0 817 369 A2&A3 AJ13 N/A PCT WO 91/18445 A1 11/1991 AK13 N/A PCT -05/1999 WO 99/23755 A1 AL13 No JΡ 09/1981 JP 56-114451 AM13 OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Hospitalier, E., "Instruments for Recording and Observing Rapidly Varying Phenomena," *Science Abstracts*, IEE, Vol. VII, pp. 22-23 (1904). <u>13</u> AN Howard, I.M. and Swansson, N.S., "Demodulating High Frequency Resonance Signals for Bearing Fault Detection," The Institution of Engineers Australia Vibration and Noise Conference, Institution of Engineers, AO <u>13</u> Australia, pp. 115-121 (September 18-20, 1990). Hu, X., A Switched-Current Sample-and-Hold Amplifier for FM Demodulation, Thesis for Master of Applied Science, Dept. of Electrical and Computer Engineering, University of Toronto, UMI Dissertation Services, pp. 1-AΡ <u>13</u> 64 (1995). Hung, H-L. A. et al., "Characterization of Microwave Integrated Circuits Using An Optical Phase-Locking and Sampling System," IEEE MTT-S Digest, IEEE, pp. 507-510 (1991). AQ <u>13</u> Hurst, P.J., "Shifting the Frequency Response of Switched-Capacitor Filters by Nonuniform Sampling," IEEE Transactions on Circuits and Systems, IEEE Circuits and Systems Society, Vol. 38, No. 1, pp. 12-19 (January 13 AR 1991). DATE CONSIDERED **EXAMINER EXAMINER**: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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·	AA14	4,80	1,823	01/19	989	Yoko	oyama .					
	AB14	4,80	6,790	02/19	989	Sone	2	*		<u> </u>		
- <u>-</u>	AC14	4,81	0,904	03/19	989	Crav	vford		<u> </u>		<u> </u>	
	AD14	4,81	0,976	03/19	989	Cow	ley et al.		ļ			
	AE14	4,81	1,362	03/19	89	Yest	er, Jr. <i>et al</i> .		ļ		<u> </u>	
	AF14	4,81	9,252	04/19	989	Chris	stopher			<u> </u>		
	AG14	4,83	3,445	05/19	989	Buch	nele					
	AH14	4,86	2,121	08/19	989	Hoch	nschild et al.					
,	Al14	4,86	8,654	09/19	989	Juri	et al.				`	
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	AJ14	JP 8	3-32556		02/1996	996 JP					No	
	AK14	3-139524		05/1996		JP				No		
	AL14	AL14 JP 59-144249				/1984 JP				,	No.	
	AM14	JP 6	3-54002		03/1988		JP				No	
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	AN	<u>14</u>				oling pulse width on the frequency characteristics of a sample-and-hold circuit," ces and Systems, IEE, Vol. 141, No. 4, pp. 328-336 (August 1994).						
·	AO	<u>14</u>					troboscopic' Oscilloscop view, Philips Research L					
	AP	<u>14</u>	Janssen, J.M.I Mc/s: II. Electr (September 19	ical E	d Michels, A Build-Up," <i>Pl</i>	.J., "A hilips ī	n Experimental 'Stroboso Fechnical Review, Philips	copic' ( s Resea	Oscilloscope arch Labora	for Frequenc tories, Vol. 12	cies up to about 50 2, No. 3, pp. 73-82	
	AQ 14 Jondral, V.F. <i>et al.</i> , "Doppler P June 1996).						for Communication Sate	llites," <i>l</i>	Frequenz, H	erausberger,	pp. 111-116 (May-	
	AR	Kaleh, G.K., "A	quency Dive	ersity S	Spread Spectrum System EEE Communications S	n for Co lociety,	ommunicatio pp. 66-70 (	n in the Pres 1995).	ence of In-band			
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INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO. APPLICATION NO. 1744.1380000 10/719,058

FIRST NAMED INVENTOR Gregory S. Rawlins

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	AA15	4,87	0,659	09/19	989	Ois	shi et al.				
	AB15	4,87	1,987	10/19	989	Kav	wase				
	AC15	4,88	5,587	12/19	989	Wie	egand et al.				
	AD15	4,88	5,756	12/19	989	For	ntanes et al.	·			
	AE15	4,88	8,557	12/19	989	Pu	ckette, IV et al.				
	AF15	4,89	0,302	12/19	989	Mu	ilwijk				
	AG15	4,89	3,316	01/19	990	Jar	nc et al.				
	AH15	4,89	3,341	01/19	990	Ge	hring				
	AI15	4,89	4,766	01/19	990	De	Agro				1
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	AJ15	JP 6	-237276		08/1994		JP				No
	AK15	JP 8	-23359		01/1996		JP			•	No
	AL15	JP 4	7-2314		02/1972		JP				Yes (Doc. AP53)
-	AM15	JP 5	8-7903		01/1983 JP						Partial (Doc. AQ53)
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	AN	<u>15</u>	Karasawa, Y Transactions 1614 (Nover	on An	tennas and l	dicti Prop	on Method for Tropospheric agation, IEEE Antennas and	Scintillati I Propaga	on on E	Earth-Space F ciety, Vol. 36	Paths," <i>IEEE</i> , No. 11, pp. 1608-
	AO	<u>15</u>	Kirsten, J. a Cahners Pul	nd Flen blishing	ning, J., "Und 1, Vol. 35, No	dersa o. 13	ampling reduces data-acquis , pp. 217-222, 224, 226-228	sition cost (June 21	s for se , 1990).	elect applicati	ons," <i>EDN</i> ,
	Lam, W.K. et al., "Measurement of the Phase Noise Characteristics of an Unlocked Communications Chanr Identifier," <i>Proceedings Of the 1993 IEEE International Frequency Control Symposium</i> , IEEE, pp. 283-288 (. 2-4, 1993).									cations Channel pp. 283-288 (June	
	AQ 15 Lam, W.K. et al., "Wideband sounding of 11.6 Ghz transhorizon channel," Elect 9, pp. 738-739 (April 28, 1994).									onics Letters,	IEE, Vol. 30, No.
,	AR	<u>15</u>	Larkin, K.G. pp. 101-102				for bandpass sampled AM s	ignals," <i>E</i>	Electron	ics Letters, IE	EE, Vol. 32, No. 2,
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# FORM PTO-1449

## INFORMATION DISCLOSURE STATEMENT

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NUMBER

4,896,152

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ATTY. DOCKET NO. APPLICATION NO. 1744.1380000 10/719,058 FIRST NAMED INVENTOR Gregory S. Rawlins GROUP FILING DATE To Be Assigned November 24, 2003

**CLASS** 

SUB-

CLASS

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	AB16	4,90	2,979	02/19	990	Puck	ette, IV			
	AC16	4,90	8,579	03/19	990	Tawl	ik et al.			
	AD16	4,91	0,752	03/19	990	Yest	er, Jr. <i>et al</i> .			
	AE16	<del></del>	4,405	04/19	990	Well	S			
	AF16	<del> </del>	0,510	04/19	990	Send	lerowicz et al.			1
	AG16		2,452	05/19	990	Larse	en <i>et al</i> .			***
1	AH16		1,921	06/19	990	Ande	erson			
	Al16		4,025	07/19	990	Gehi	ing et al.			
			·		FOREIGN	N PAT	ENT DOCUMENTS		•	
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	AJ16	JP 5	8-133004		08/1983		JP			No
	AK16	JP 6	0-58705		04/1985		JP			No
	AL16	JP 4	-123614	-	04/1992		JP			No
	AM16	JP 4	-127601		04/1992		JP			No
	•		ОТН	=R (In	cludina Aut	hor T	itle, Date, Pertinent Page	es etc.)		
	AO	<u>16</u>	Lau, W.H. <i>et</i> No. 20, pp. 1				orithm to Identify Multipath , 1987).	Components," E	lectronics Le	etters, IEE, Vol. 23
•	AP	<u>16</u>	Lesage, P. at Transactions 28, No. 1, pp	on Ins	strumentatio	n and i	Dead-Time on the Estimati Measurement, IEEE Instru	ion of the Two-Sa mentation and M	ample Varian easurement	ice," <i>IEEE</i> Society, Vol. IM-
	AQ	<u>16</u>	Speed Modul	lators,'	" IEEE Trans	saction	ate GaAs MESFET's as Ga is on Microwave Theory ar . 6, pp. 461-469 (June 197	nd Techniques, IE	w-Noise Amp EEE Microwa	olifiers and High- eve Theory and
	AR	<u>16</u>					ample Per Second Transic ciences Society, Vol. NS-2			
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conformance and not considered. Include copy of this form with next communication to Applicant.

**U.S. PATENT DOCUMENTS** 

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	1	4,955,079		990	Conne	rney et al.		<del> </del>	1
	AA17		40/4	990	Bilterijs	st		<del> </del>	
	AB17	4,965,46	100	990	Quievy	/ et al		<del> </del>	1
	AC17	4,967,16	441	990	Hariha	ran et al.		+	1
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	AE17	4,982,35	<u> </u>	1991	Uchida	a			
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	AK17	JP 5-1		07/1993		JP			No
	AL17	JP 7-1	54344	06/1995		JP			No
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	AO	17	Lo, P. et al., "(March 26, 19)  Lo, P. et al., " Third Internat	Coherent Auto 30).  Computation ional Confere	of Rain	sain Control," IEE Colloqui	ium on Phase Lo Satellite Down-L n (ICAP 83), pp.	inks at Micro 127-131 (Ap	iques, IEE, pp. 2/1-2/ pwave Frequencies," oril 12-15, 1983).
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ATTY. DOCKET NO. APPLICATION NO. 1744.1380000 10/719,058

FIRST NAMED INVENTOR Gregory S. Rawlins

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	AA18	5,006,810	04/19	91	Pope	escu				
	AB18	5,010,585	04/19	91	Gard	ia				
	AC18	5,014,304	05/19	991	Nico	llini et al.				
	AD18	5,015,963	05/19	91	Sutto	n				
	AE18	5,017,924	05/19	91	Guib	erteau <i>et al</i> .				
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	AH18	5,052,050	09/19	991	Colli	er et al.				
	AI18	5,065,409	11/19	991	Hugh	nes et al.				
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	AJ18	JP 55-66057		05/1980		JP				No
	AK18	JP 63-65587		03/1988		JP		-		No
	AL18	JP 63-153691		06/1988		JP				No
	AM18	EP 0 276 130	A2&A3	3 07/1988		EP				N/A
		<u> </u>	OTHER (In	cluding Author, Title, Date, Pertinent Pages, etc.)						
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	AN	18 Marslar Institute	nd, R.A. <i>et a</i> of Physics,	<i>I.</i> , "130 Ghz Vol. 55, No	GaAs . 6, pp	monolithic integrated cine 592-594 (August 7, 19	cuit samp 39).	oling head	d," Appl. Phys	s. Lett., American
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	AR	18 McQuer Vol. XX	en, J.G., "Th IV, No. 296,	ne Monitorin pp. 436-44	g of Hi 1 (Octo	igh-Speed Waveforms," ober 1952).	Electronic	: Enginee	ering, Morgan	Brothers Limited,
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	AA19	5,08	3,050	01/19	992	Va	sile				
	AB19	5,09	1,921	02/19	992	Mir	nami				1:
	AC19	5,09	5,533	03/19	992	Lo	per et al.				
	AD19	5,09	5,536	03/19	992	Lo	per				<u> </u>
	AE19	5,11	1,152	05/19	992	Ma	kino				
	AF19	5,11	3,094	05/19	992	Gra	ace et al.				
	AG19	5,11	3,129	05/19	992	+	ghes				
	AH19	5,12	2,765	06/19		Pa	taut				<u></u>
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	AL19	EP 0	254 844 A2		02/1988		EP				N/A
<del></del>	AM19	EP 0	632 577 A1		01/1995	I/1995 EP					N/A
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	AA21	5,21	2,827	05/19	993	Mesa	zko <i>et al</i> .			<u> </u>	
	AB21	5,21	4,787	05/19	993	Kark	ota, Jr.				
	AC21	5,22	0,583	06/19	993	Solo	mon				
	AD21	5,22	0,680	06/19	993	Lee					
	AE21	5,22	2,144	06/19	993	While	kehart				
	AF21	5,23	0,097	07/19	993	Curr	ie et al.				
	AG21	5,23	9,686	08/19	993	Dow	ney				
	AH21	5,24	1,561	08/19	993	Barn	ard				
	Al21	5,24	9,203	09/19	993	Lope	er'				
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	AJ21	EP (	0 789 449 A2 8	A3	08/1997		EP				N/A
	AK21	FR 2	2 669 787 A1		05/1992		FR		_		No
	AL21	GB	2 324 919 A		11/1998	GB					N/A
	AM21	JP 6	61-30821		02/1986		JP				No
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	AN	<u>21</u>					nic Sampler for Signal Dov 5, No. 12, 7 pages (Decem			EE Transac	tions on Microwave
	AO	<u>21</u>	Peeters, G. 6 Measuremen 88 (March-A	its," <i>In</i>	ternational J	f Stati	stical Models for Clear-Air of Satellite Communication	Scintillations, John	on Pred Wiley ar	ction Using nd Sons, Vol	Olympus Satellite . 15, No. 2, pp. 73-
	AP	<u>21</u>	Perrey, A.G. Dept. of Corr	and S	choenwetter e, pp. 1-14 (N	, Н.К., Иау 19	NBS Technical Note 1121 980).	1: A Schol	ttky Diod	de Bridge Sa	ampling Gate, U.S.
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FIRST NAMED INVENTOR Gregory S. Rawlins

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<del></del>	AA22	5,251,218	10/19	993	Ston	e et al.			<b>1</b>
*	AB22	5,251,232	10/19		None	<del></del>			
	AC22	5,260,970	11/19	993	Henr	y et al.			
	AD22	5,263,194	11/19		Raga	<del></del>			**
-	AE22	5,263,196	11/19		Jasp				
	AF22	5,267,023	11/19	993	Kawa		i		
	AG22	5,278,826	01/19	994	Murp	hy et al.			
	AH22	5,282,023	01/19	994	Scar				
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	AJ22	JP 5-327356		12/1993		JP		02.00	No
	AK22	EP 0 643 477 A2	& A3	03/1995		EP			N/A
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	AP			arkervision, I es (April 26,		nounces First Quarter Fin	ancial Results,"	Lippert/Heilsh	orn and
	AQ					nounces The Retirement of age (May 11, 1994).	of William H. Fle	tcher, Chief F	inancial Officer,"
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	AA23	5,29	3,398	03/19	994	Ham	ao et al.				i i
· ·	AB23	5,30	3,417	04/19	994	Laws	_ <del></del>				
	AC23	5,30	7,517	04/19	994	Rich					
	AD23	5,31	5,583	05/19	994	Murp	hy et al.				
	AE23	1	1,852	06/19	994	Seor	ig				
	AF23	1	5,204	06/19	994	Scar					
	AG23	1	7,014	08/19	994		et al.				
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	AK23	JP 9	-36664	02/1997			JP				No
	AL23	DE 1	96 48 915 A1		06/1998 DE						Yes (Doc. AO59)
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	AQ	<u>23</u>	Press Releas Lippert/Heils	se, "Pa horn a	arkervision, II nd Associate	nc. An es, 2 P	nounces First Significar ages (November 7, 199	nt Deal 94).	er Sale of Its	Cameraman	® System II,"
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	AA24	5,35	5,114	10/19	994	Sutte	rlin et al.						
	AB24	5,36	1,408	11/19	994	Wata	nabe et al.						
	AC24	5,369	9,800	11/19	994	Taka	gi <i>et al</i> .						
	AD24	5,37	5,146	12/19	994	Chal	mers						
	AE24	5,379	9,040	01/19	995	Mizo	moto et al.			1			
	AF24	5,379	9,141	01/19	995	Thon	npson et al.						
	AG24	<del></del>	8,063	02/19	95	Taka	tori <i>et al</i> .						
	AH24	5,39	0,364	02/19	95	Web	ster et al.						
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## INFORMATION DISCLOSURE STATEMENT

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FIRST NAMED INVENTOR Gregory S. Rawlins

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EXAMINER INITIAL		DOC	UMENT IBER	DATE		NAM			CLASS	SUB- CLASS	FILING DATE
	AA25	5,40	4,127	04/19	95	Lee	et al.				
	AB25	5,410	0,541	04/19	95	Hotte	)				
	AC25	5,41	0,743	04/19	95	Seel	y et al.				
	AD25	5,41	2,352	05/19	95	Grah	am			<u> </u>	
	AE25	5,41	6,803	05/19	95	Jane	<u>r</u>				
	AF25	5,42	2,913	06/19	95	Wilki	nson				
	AG25	5,42	3,082	06/19	95	Cyga	n et al.			<u> </u>	
	AH25	5,42	8,638	06/19	95	Cioff	i et al.				
	Al25	5,42	8,640	06/19	95	Tow	nley				
					FOREIGN	PAT	ENT DOCUMENTS			T	
EXAMINER INITIAL		DOC	CUMENT NUM	BER	DATE	···	COUNTRY		CLASS	SUB- CLASS	TRANSLATION
·	AJ										Yes No
	AK									,	Yes No
	AL										Yes No
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	AN	<u>25</u>	Marketing ar	nd Man	ufacturing H	eadqu	nounces Second Quarters, 2 Pages (July 31	, 1995). System II	,		
<del></del>			and Manufac	turing	неаодиале	rs, 2 P	ages (September 22, 19				
	AP,	<u>25</u>					ces New Camera Contr s (October 25, 1995).	ol Techn	ology," Par	kervision Ma	arketing and
	AQ	<u>25</u>	Press Relea Parkervision	se, "Pa Marke	irkervision, li ting and Mai	nc. An nufact	nounces Completion of uring Headquarters, 2 P	VTEL/Pa ages (Od	arkervision otober 30,	Joint Produc 1995).	et Line,"
	AR	<u>25</u>	Press Relea Marketing ar	se, "Pa nd Man	irkervision, li ufacturing H	nc. An leadqu	nounces Third Quarter larters, 2 Pages (Octobe	and Nine er 30, 199	Months Fi 95).	nancial Resu	ults," Parkervision
EXAMINER					· <u>*</u> ·			D	ATE CON	SIDERED	

ATTY. DOCKET NO. APPLICATION NO. 10/719,058 1744.1380000 FIRST NAMED INVENTOR Gregory S. Rawlins

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INITIAL		DOCUMENT NUMBER	DAT		NAM			CLASS	SUB- CLASS	FILING DATE		
	AA26	5,434,546	07/1		Palm							
	AB26	5,438,692	08/1		Mohi	ndra				<u> </u>		
	AC26	5,444,415	08/1	995	Dent	et al.						
	AD26	5,444,416	08/1	995	Ishik	awa et al.		ļ	<b>_</b>	1		
	AE26	5,444,865	08/1	995	Heck	et al.						
	AF26	5,446,421	08/1	995	Kech	kaylo						
	AG26	5,446,422	08/1	995	Matti	la et al.						
	AH26	5,448,602	09/1	995	Ohm	ori <i>et al.</i>						
	Al26	5,451,899	09/1	995	Lawt	on						
				FOREIGI	N PAT	ENT DOCUMENTS						
EXAMINER INITIAL		DOCUMENT N	JMBER	DATE		COUNTRY		CLASS	SUB- CLASS	TRANSLATION		
	AJ									Yes No		
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	AL						_			Yes		
	АМ									Yes		
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	AN	26 Press Rel Parkervisi	ease, "Pa on Marke	arkervision's eting and Ma	Came	raman Personal Locator uring Headquarters, 2 P	r Came Pages (	era System V November 1,	Vins Telecon , 1995).	XV Award,"		
	AO	26 Press Rel Marketing	ease, "Pa and Mar	arkervision, I nufacturing H	Inc. An Ieadqu	nounces Purchase Com arters, 1 Page (Februar	nmitme ry 26, 1	ent From VTE 1996).	EL Corporatio	n," Parkervision		
	AP .	26 Press Rel and Manu	ease, "Pa facturing	arkerVision, Headquarte	Inc. Ar ers, 2 P	nnounces Fourth Quarte ages (February 27, 199	er and ` 16).	Year End Res	sults," Parker	vision Marketing		
	AQ	26 Press Rel Headquar	ease, "Pa ters, 2 Pa	arkerVision, ages (March	vision, Inc. Expands its Product Line," Parkervision Marketing and Manufacturing (March 7, 1996).							
	AR					atents for its Research o age (March 28, 1996).	of Wire	eless Techno	logy," Parker	vision Marketing		
EXAMINER		<u> </u>		<del> </del>		1 174 1		DATE CON	SIDERED	10		

APPLICATION NO. ATTY. DOCKET NO. 1744.1380000 10/719,058

	I	ORM I	PTO-1449			FIRST NAMED INVENTOR							
TNE	ORMATIO	N DIS	CLOSURE STA	TEME	NT	Gregory S. Rawlins							
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EXAMINER INITIAL			CUMENT IBER	DAT	E	NAM	IE		CLASS	SUB- CLASS	FILING DATE		
	AA27	5,45	4,007	09/19	995	Dutta	<u> </u>				<u> </u>		
	AB27	5,45	4,009	09/19	995	95 Fruit et al.							
	AC27	5,46	3,356	10/19	995								
	AD27	5,46	3,357	10/19									
	AE27		5,071	11/19		Koba	ayashi et al.				_		
	AF27		5,410	11/19		<del>                                     </del>	n et al.			+	-		
	AG27		5,415	11/19		Bien					-		
	AH27	<del></del>	1,162	11/19		McEwan							
	Al27	5,47	9,120	12/19		McE			ļ				
·	<u> </u>				FOREIGN	N PAT	ENT DOCUMENTS		i ·	<del></del>	<u> </u>		
EXAMINER INITIAL		DOC	CUMENT NUM	BER	DATE		COUNTRY		CLASS	SUB- CLASS	TRANSLATION		
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	AN	<u>27</u>	Press Relea Parkervision	se, "Pa Marke	arkervision, l eting and Ma	nc. Ar nufact	nounces First Significant uring Headquarters, 2 pa	t Sale o iges (A <sub>l</sub>	f Its Camer oril 12, 1996	aman® Thre 6).	e-Chip System,"		
	AO	<u>27</u>	Press Relea Marketing ar	se, "Pa nd Man	arkervision, I aufacturing H	nc. Int leadqı	roduces New Product Lir larters, 2 Pages (April 15	ne For \$ 5, 1996)	Studio Prod	uction Marke	t," Parkervision		
	AP .	<u>27</u>	Press Relea and Manufac	se, "Pa cturing	arkervision, I Headquarte	nc. Ar rs, 1 F	inounces Private Placem lage (April 15, 1996).	ent of 8	300,000 Sha	nres," Parker	vision Marketing		
	AQ	<u>27</u>	Press Relea Manufacturir	se, "Pa ng Hea	arkervision, I dquarters, 3	nc. Ar Page	nounces First Quarter Fi s (April 30, 1996).	nancial	Results," F	Parkervision I	Marketing and		
	AR	<u>27</u>	Press Relea Headquarter	Studio Product Wins Awa i).	Wins Award," Parkervision Marketing and Manufacturing								
EXAMINER		<u>I</u>	I				· · · · · · · · · · · · · · · · · · ·	. [	DATE CON	SIDERED	<del> </del>		

ATTY. DOCKET NO. APPLICATION NO. 1744.1380000 10/719,058

FIRST NAMED INVENTOR Gregory S. Rawlins

FILING DATE GROUP

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	AA28	5,47	9,447	12/19	995	Cho	w et al.					
	AB28	5,48	3,193	01/19	996	Kenr	nedy et al.			<u> </u>	<u> </u>	
	AC28		3,549	01/19		<del>                                     </del>	nberg et al.				<del>                                     </del>	
	AD28	+-	3,691	01/19		<del>                                     </del>	c et al.		<del></del>	<del> </del>		
*******	AE28	<del> </del>	0,173	02/19		<del>                                     </del>	kehart et al.		+	+	<u> </u>	
	AF28	+	3,581	02/19		1	ng et al.		+	+		
	AG28	1	3,721	02/19		Reis		<del></del>	+	+	1	
	AH28	1	5,200	02/19		<del>                                     </del>	n <i>et al.</i>		+	+		
	Al28	5,49	5,202	02/19		HSU						
EXAMINER		T			FUREIGR	1 PAI	ENT DOCUMENTS		T	T	T	
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	AM										Yes No	
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	AN	<u>28</u>	Press Releas Marketing an	se, "Pa d Man	arkervision, l uufacturing H	nc. An leadqu	nounces Second Quarter arters, 3 Pages (August	r and 1, 199	Six Months F 96).	inancial Res	ults," Parkervision	
	AO	<u>28</u>	Press Releas Marketing an	se, "Pa d Man	arkervision, l aufacturing H	nc. An leadqu	nounces Third Quarter and larters, 2 Pages (October	nd Nii 29, 1	ne Months Fi 996).	nancial Resu	ılts," Parkervision	
	AP	<u>28</u>					erVision Sign Reseller Ag s (October 30, 1996).	reem	ent," Parkerv	ision Marketi	ng and	
	AQ	<u>28</u>	Press Releas Pages (Janua			rVisio	n Bring Enhanced Ease-o	of-Use	to Videocon	ferencing," C	CLI/Parkervision, 2	
	AR 28 Press Release, "Parkervision, Inc. Announces Fourth Quarter and Year End Results," Parkervision Marketing and Manufacturing Headquarters, 3 Pages (February 27, 1997).											
EXAMINER			I					• ]	DATE CON	SIDERED		

ATTY. DOCKET NO. 1744.1380000 10/719,058

FIRST NAMED INVENTOR Gregory S. Rawlins

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	AA29	5,49	5,500	02/19	96	Jova	novich <i>et al.</i>			<u> </u>				
	AB29	5,499	9,267	03/19	96	Ohe	et al.			<u> </u>				
	AC29	5,500	0,758	03/19	96	Thon	npson <i>et al</i> .							
	AD29	5,517	7,688	05/19	96	Fajer	et al.							
	AE29	5,519	9,890	05/19	96	Pinckley								
	AF29	5,523	3,719	06/19	96	Long	o et al.							
	AG29	5,523	3,726	06/19	96	Kroe	ger et al.		<u> </u>					
	AH29	5,52	3,760	06/19	96	McE	wan							
	AI29	5,539	9,770	07/19	96	Ishigaki								
					FOREIGN	PAT	ENT DOCUMENTS							
EXAMINER INITIAL		DOC	UMENT NUM	BER_	DATE		COUNTRY	C	LASS	SUB- CLASS	TRANSLATION			
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	AK										Yes No			
	AL										Yes No			
	AM										Yes No			
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	1	<del></del>	1	(,,,,		,								
	AN	<u>29</u>	Press Releas Manufacturin	e, "Pa g Head	rkervision, Ir dquarters, 3	nc. An Pages	nounces First Quarter Fina (April 29, 1997).	ancial R	esults," P	arkervision N	Marketing and			
	AO	<u>29</u>	Press Releas 1997).	e, "NE	EC and Parke	ervisio	n Make Distance Learning	Closer,	" NEC Ar	nerica, 2 Pag	ges (June 18,			
	AP	<u>29</u>	Press Releas Parkervision	se, "Pa Marke	rkervision Su ting and Mar	upplie: nufacti	s JPL with Robotic Camera uring Headquarters, 2 page	as, Cam es (July	eraman \$ 8, 1997).	Shot Director	for Mars Mission,"			
	AQ	<u>29</u>	Press Release, "ParkerVision and IBM Join Forces to Create Wireless Computer Peripherals," Parkervision Marketing and Manufacturing Headquarters, 2 Pages (July 23, 1997).											
	AR 29 Press Release, "ParkerVision, Inc. Announces Second Quarter and Six Months Financial Results," Parkervision Marketing and Manufacturing Headquarters, 3 Pages (July 31, 1997).													
EXAMINER	1L		I					DA	TE CONS	SIDERED				

ATTY. DOCKET NO. APPLICATION NO. 1744.1380000 10/719,058

FIRST NAMED INVENTOR Gregory S. Rawlins

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EXAMINER INITIAL			CUMENT IBER	DATI	E	NAM	E		CLASS	SUB- CLASS	FILING DATE			
<u>-</u>	AA30	5,55	5,453	09/19	996	Kajin	noto <i>et al.</i>							
	AB30	5,55	7,641	09/19	996	Weir	berg							
	AC30	5,55	7,642	09/19	96 Williams					1				
	AD30	5,579	9,341	11/19	996	Smit	h <i>et al</i> .	_						
	AE30	5,579	9,347	11/19	996	Lindquist et al.				- "				
	AF30	5,584	4,068	12/19	996	Mohi	ndra							
	AG30	5,59	2,131	01/19	997	Labr	eche <i>et al</i> .	-						
	AH30	1	2,847	02/19	997	Paga	no et al.	<del>.</del>						
	AI30	+	2,868	02/19	997	Wilson								
	1,1111	1 - 1 - 1	-15			GN PATENT DOCUMENTS								
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	AK										Yes No			
	AL										Yes No			
	АМ										Yes No			
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	AN	30	Press Relea and Manufac	se, "Pa	arkervision, I Headquarte	nc. An rs, 2 P	nounces Private Placem ages (September 8, 199	nent of 9 17).	990,000 Sha	ares," Parker	vision Marketing			
	AO	<u>30</u>					arkervision for Broadcas s (October 24, 1997).	st Produ	uction," Parl	kervision Mar	keting and			
	AP	<u>30</u>	Press Relea Manufacturii	se, "Pa ng Hea	arkervision, I dquarters, 3	nc. An Pages	nounces Third Quarter F s (October 30, 1997).	inancia	ıl Results,"	Parkervision	Marketing and			
	AQ	<u>30</u>	Press Relea Marketing a				iency Techno	ology," Parkervision						
	AR	<u>30</u>	Press Relea President, L Pages (Janu	icensin	g - Wireless	Inc. An Techr	nounces the Appointme nologies," Parkervision N	nt of Jos Narketin	seph F. Sko g and Mani	ovron to the Fufacturing He	Position of Vice eadquarters, 2			
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## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO. 1744.1380000	APPLICATION NO. 10/719,058
FIRST NAMED INVENTOR Gregory S. Rawlins	
FILING DATE November 24, 2003	GROUP To Be Assigned

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	AA31	5,604,732	02/19	997	Kim	et al.		_				
	AB31	5,608,531	03/19	997	Hono	la et al.		_				
	AC31	5,610,946	03/19	997	Tana	ka et al.		_				
	AD31	RE 35,494	04/19	997	Nicol	lini			ļ			
	AE31	5,617,451	04/19	997	7 Mimura et al.							
	AF31	5,619,538	04/1	997	Sem	pel <i>et al</i> .						
	AG31	5,621,455	04/1	997	Roge	ers et al.						
	AH31	5,630,227	05/19	997	Bella	et al.						
	AI31	5,640,415	06/1	997	Pandula							
				FOREIGI	N PAT	ENT DOCUMENTS						
EXAMINER INITIAL		DOCUMENT	Γ NUMBER	DATE		COUNTRY		CLASS	SUB- CLASS	TRANSLATION		
	AJ									Yes No		
	AK									Yes No		
	AL									Yes No		
	АМ									Yes		
-			OTHER (In	cluding Aut	thor T	itle, Date, Pertinent Pa	ages, etc	:.)				
	AN .	31 Strate	Release, "Pa gic Focus An ary 27, 1998)	nounced in I	nnoun Decem	ces Existing Agreemen ber," Parkervision Marl	nt with IBN keting an	M Terminated Manufact	es Compan uring Headqu	y Continues with uarters, 2 Pages		
	AO	31 Press Manuf	Release, "La facturing Hea	aboratory Te dquarters, 2	sts Vei Pages	rify Parkervision Wireler s (March 3, 1998).	ss Techn	ology," Par	kervision Ma	rketing and		
	AP	31 Press Marke	Release, "Pating and Mar	arkervision, l nufacturing h	Inc. An Ieadqu	nounces Fourth Quarte arters, 3 Pages (March	er and Ye n 5, 1998)	ar End Fina ).	ancial Results	s," Parkervision		
	AQ					d Editors' Pick of Show s (April 15, 1998).	for NAB	98," Parke	rvision Marke	eting and		
	AR	31 Press Manuf	Release, "Pa facturing Hea	arkervision Andquarters, 3	Announ B Page:	ces First Quarter Finans (May 4, 1998).	ncial Resi	ults," Parke	rvision Marke	eting and		
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## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.

1744.1380000

FIRST NAMED INVENTOR
Gregory S. Rawlins

FILING DATE
November 24, 2003

APPLICATION NO.

10/719,058

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	AA32	5,64	0,424	06/19	97	Bana	vong <i>et al</i> .					
	AB32	5,64	0,428	06/19	97	Abe	et al.					
	AC32	5,64	0,698	06/19	997	Shen et al.						
	AD32	5,64	8,985	07/19	97	Bjerede et al.						
	AE32	5,65	0,785	07/19	997	Roda	1			Ì		
	AF32	5,66	1,424	08/19	997	Tang						
	AG32	5,66	3,878	09/19	09/1997		Walker					
	AH32	5,66	3,986	09/19	997	Striff	Striffler					
	Al32	5,66	8,836	09/1997		Smitl	n et al.					
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	AO	<u>32</u>	Marketing ar	se, "Pa	ufacturing H	leadqu xpand	F2DATA' Introduced in Rearters, 3 Pages (July 9, 1	1998).				
	АР	<u>32</u>	Press Releas Marketing ar	se, "Pa id Man	rkervision A ufacturing H	innoun leadqu	ces Second Quarter and arters, 4 Pages (July 30,	Six Montl 1998).	h Financia	al Results," F	Parkervision	
	AQ	<u>32</u>					ces Third Quarter and Ni arters, 3 Pages (October			l Results," P	arkervision	
	AR	Press Release, "Questar Infocomm, Inc. Invests \$5 Million in Parkervision Common Stock," Parkervision Marketing and Manufacturing Headquarters, 3 Pages (December 2, 1998).										
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ATTY. DOCKET NO. APPLICATION NO. 10/719,058 1744.1380000 FIRST NAMED INVENTOR Gregory S. Rawlins

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EXAMINER INITIAL			CUMENT MBER	DATI	E	NAM	E		CLASS	SUB- CLASS	FILING DATE	
	AA33	5,68	0,078	10/19	997	Ariie						
	AB33	5,68	0,418	10/19	997	Croft	et al.					
	AC33	5,68	9,413	11/19	997	Jarai	millo <i>et al.</i>		ļ			
	AD33	5.69	9,006	12/19	997							
	AE33		5,955	01/19		Free	burg et al.				-	
	AF33		0,998	01/19		Opas						
_	AG33		4,910	02/19		<del></del>	zen et al.					
	AH33		5,281	02/19		Bly e			- · · · · · ·	<u> </u>	<del></del>	
	AI33		1,514	02/19		—	kett <i>et al</i> .			1		
	Alss	3,72	1,514	02/13		GN PATENT DOCUMENTS						
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EXAMINER INITIAL		DOC	CUMENT NUM	IBER	DATE		COUNTRY		CLASS	SUB- CLASS	TRANSLATION	
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	AK										Yes No	
	AL										Yes No	
	AM										Yes No	
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	AN	<u>33</u>	Press Relea Headquarter	se, "Pa s, 2 Pa	arkervision A ages (March	dds Tv 5, 199	wo New Directors," Park 19).	kervisio	n Marketing	and Manufac	sturing	
	AO	<u>33</u>	Press Relea Marketing ar	se, "Pa nd Man	arkervision A nufacturing H	nnoun leadqu	ices Fourth Quarter and larters, 3 Pages (March	Year E 5, 1999	End Financia 9).	l Results," Pa	arkervision	
	AP	<u>33</u>	Press Relea Marketing ar	se, "Jo nd Man	oint Marketing oufacturing H	g Agre leadqu	ement Offers New Auto arters, 2 Pages (April 1	mated 3, 1999	Production S	Solution," Par	kervision	
	AQ	33			i: Scintillation 209-211 (M		arth-satellite links," <i>Alta</i> ne, 1985).	Frequ	enza: Scient	ific Review in	Electronics, AEI,	
	AR	<u>33</u>	Razavi, B., /	RF Mic	roelectronics	s, Pren	itice-Hall, pp. 147-149 (1	1998).				
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#### INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO. APPLICATION NO. 1744.1380000 10/719,058

FIRST NAMED INVENTOR Gregory S. Rawlins

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- "	AA34	5,724	1,002	03/19	998	Hulic	k					
	AB34	5,724		03/19	998	Bake	r et al.					
	AC34	5,729		03/19	998	Cher						
	AD34	5,729	9,829	03/19	998	Talw	ar et al.					
· · · · · · · · · · · · · · · · · · ·	AE34	5,732	2,333	03/19	998	Cox	et al.					
	AF34	5,736	5,895	04/19	998	*******						
	AG34	5,737	7,035	04/19	998 Rotzoll							
	AH34	5,742	2,189	04/19	998	Yoshida et al.						
	Al34	5,748	3,683	05/19	05/1998		n <i>et al</i> .					
					FOREIGN	N PATI	ENT DOCUMENTS		-			
EXAMINER INITIAL		DOC	UMENT NUM	BER	DATE		COUNTRY		CLASS	SUB- CLASS	TRANSLATION	
	AJ										Yes No	
	AK										Yes No	
	AL						,				Yes No	
	АМ								-		Yes No	
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	AN	<u>34</u>	Reeves, R.J. Brothers Lim	D., "TI ited, V	ne Recording	g and (	Collocation of Waveform . 130-137 (March 1959)	ns (Pai	rt 1)," Electro	nic Engineer	ing, Morgan	
	AO	<u>34</u>	Reeves, R.J. Brothers Lim	D., "TI ited, V	ne Recording ol. 31, No. 3	g and ( 374, pp	Collocation of Waveform . 204-212 (April 1959).	ns (Pai	rt 2), <b>"</b> Electro	nic Engineen	ing, Morgan	
	AP	<u>34</u>	Rein, H.M. a Transistors,"	nd Zah <i>Electr</i>	nn, M., "Subr	nanose s, IEE,	cond-Pulse Generator v Vol. 11, No. 1, pp. 21-2	with Va 23 (Jan	ariable Pulse luary 9, 1975	width Using A ).	Avalanche	
	AQ	<u>34</u>	Riad, S.M. a	nd Nah <i>Intern</i>	nman, N.S., ' ational Micro	"Mode owave	ing of the Feed-through Symposium Digest, IEE	n Wide EE, pp.	band (DC to 267-269 (Ju	12.4 Ghz) Sa ne 27-29, 19	mpling-Head," 78).	
9.	AR  Rizzoli, V. et al., "Computer-Aided Noise Analysis of MESFET and HEMT Mixers," IEEE Transactions on Microwave Theory and Techniques, IEEE, Vol. 37, No. 9, pp. 1401-1410 (September 1989).											
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INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO. 1744.1380000	APPLICATION NO. 10/719,058
FIRST NAMED INVENTOR Gregory S. Rawlins	
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	AA35	RE	35,829	06/19	998	Sanderford, Jr.						
	AB35	5,76	60,645	06/19	998	te et al.						
	AC35	5,76	64,087	06/19	998	Clark						
	AD35	5,76	67,726	06/19	998	Wan	g					
	AE35	5,76	58,118	06/19	98 Faulk et al.							
	AF35	5,77	71,442	06/19	1998 Wang <i>et al</i> .							
	AG35	5,77	77,692	07/19	998	Ghosh						
	AH35	5,77	77,771	07/19	998	Smitl	า					
	Al35	5,78	36,844	07/19	998	Roge	ers et al.					
					FOREIGI	N PATENT DOCUMENTS						
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	AJ										Ye:	
	AK										Ye: . No	
	AL										Ye:	
	AM		· ; ·								Yes	
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	AN	<u>35</u>					nmunication Systems, E er V, Pulse Modulation S			mpany, Inc.,	Princeton, New	
	AO	<u>35</u>	Rücker, F. a Dependence	nd Dint ," <i>Elec</i>	telmann, F., tronics Lette	"Effecters, IEE	of Antenna Size on OT , Vol. 19, No. 24, pp. 1	ΓS Sigi 032-10	nal Scintillatio 034 (Novembo	ons and Their er 24, 1983).	Seasonal	
	AP	<u>35</u>					Wave Phase Locked Ond Publishers, pp. 238-				78 Conference	
	AQ	<u>35</u>		ions,"	The Institution	on of E	f a Robust Flexible Rec ngineers Australia Com , 1990).					
	AR	<u>35</u>	Salous, S., "I				ICW waveforms for widune 1992).	leband	channel cha	racterization,	" IEE Proceedings	
EXAMINER			<u> </u>						DATE CON	SIDERED		

ATTY. DOCKET NO. APPLICATION NO. 1744.1380000 10/719,058

FIRST NAMED INVENTOR Gregory S. Rawlins

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	AA36	5,79	3,801	08/19	998	Fertr	ner							
	AB36	5,79	3,818	08/19	998	Clay	don <i>et al</i> .							
	AC36	5,80	2,463	09/19	998	Zuck	erman							
	AD36	5,809	9,060	09/19	998 Cafarella et al.									
	AE36	5,818	8,582	10/19	998	Fern	andez et al.				. –			
	AF36	5,82	5,254	10/19	998	Lee								
	AG36	5,83	4,985	11/19	998	Sund	legård							
	AH36	5,86	4,754	01/19	999	Hotto	)							
	Al36	5,88	1,375	03/19	999	Bonds								
					FOREIGN	GN PATENT DOCUMENTS								
EXAMINER INITIAL		DOC	UMENT NUM	BER	DATE		COUNTRY		CLASS	SUB- CLASS	TRANSLATION			
	AJ										Yes No			
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	AL										Yes No			
	AM										Yes No			
	<u> </u>		ОТН	FR (In	cludina Aut	hor. T	itle, Date, Pertinent Pa	aes, et	c.)					
	AN	<u>36</u>	"Sampling Lo	oops L	ock Sources	to 23	Ghz," <i>Microwaves &amp; RF</i>	, Pento	n Publishing	g, p. 212 (Sep	otember 1990).			
	AO	<u>36</u>	Sasikumar, No. 1	И. <i>et a.</i> 8, pp.	., "Active Co 1008-1009 (/	ompen: August	sation in the Switched-C : 1983).	apacito	or Biquad," <i>I</i>	Proceedings	of the IEEE, IEEE,			
	АР	Saul, P.H., "A GaAs MESFET Sample and Hold Switch," Fifth European Solid State Circuits Conference-ESSCIRC 79, IEE, pp. 5-7 (1979).												
	AQ	<u>36</u>					ont-End with Integrated I its Council, Vol. 31, No.							
	AR	<u>36</u>	Shen, X.D. a path," <i>Radio</i>	ind Vila Scient	ar, E., "Anom ce, Americar	nalous n Geor	transhorizon propagatio	on and r No. 5, p	neteorologio pp. 1467-147	cal processes 79 (Septembe	s of a multilink er-October 1995).			
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ATTY. DOCKET NO. APPLICATION NO. 1744.1380000 10/719,058

FIRST NAMED INVENTOR Gregory S. Rawlins

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	AA37	5,892	2,380	04/19	99	Quis	t				
	AB37	5,894	4,239	04/19	99	Bona	ccio et al.		<u> </u>		
	AC37	5,896	6,562	04/19	999	Hein	onen				
	AD37	5,900	0,747	05/19	999	Brau	ns				
	AE37	5,90	1,054	05/19	999	Leu e	et al.				<u> </u>
	AF37	5,90	1,187	05/19	999	linun	na				
	AG37	5,90	1,344	05/19	999	Opas	<u></u>				
	AH37	5,90	1,347	05/19	999	Char	nbers <i>et al</i> .				
	Al37	5,90	1,348	05/19	999	Bang	et al.				<u></u>
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	AJ				-						Yes No
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	AM										Yes
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	AN /	<u>37</u>	Shen, X. and Mechanisms	Tawfil ," <i>Elec</i>	k, A.N., "Dyi tronics Lette	namic l ers, IEE	Behaviour of Radio Cha E, Vol. 29, No. 17, pp. 15	innels [ 582-15	Due to Trans 83 (August 1	-Horizon Pro 9, 1993).	pagation
	AO	<u>37</u>	of the parabo	lic Equ	uation and F	Ray Tra	Spherical Diffraction and cing Methods," <i>IEE Colave propagation</i> , IEE, p	loquiun	n on Commo	n modeling to	zon Path with aid echniques for
	AP	<u>37</u>	Shen, X. and Electronics L	Vilar, etters,	E., "Path los IEE, Vol. 32	ss stati 2, No. :	stics and mechanisms of the street of the st	of trans y 1, 19	horizon prop 96).	pagation over	a sea path,"
	AQ	<u>37</u>	Shen, D. et a Circuits Conf	ıl., "A 9 ference	900 MHZ Int e, IEEE, Vol	egrate . 39, p	d Discrete-Time Filtering b. 54-55 and 417 (Febru	g RF Fi lary 19	ront-End," <i>IE</i> 96).	EEE Internatio	onal Solid State
	AR	<u>37</u>		tional (			ric Transhorizon Propag ennas and Propagation				
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ATTY. DOCKET NO. 1744.1380000 10/719,058

FIRST NAMED INVENTOR Gregory S. Rawlins

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	AA38	5,90	1,349	05/19	999	Gue	gnaud <i>et al</i> .					
	AB38	5,90	3,178	05/19	999	Miya	atsuji <i>et al</i> .				<u> </u>	
	AC38	+	3,187	05/19		<del>                                     </del>	rerie et al.		<u> </u>			_
	AD38		3,196	05/19		<del> </del>	i et al.		<del> </del>			
	AE38		3,421	05/19		<del>i                                     </del>	ıtani <i>et al.</i>		<del> </del>			
-	AF38		3,553	05/19		<del>†          </del>	amoto <i>et al</i> .		┼			<del></del>
	AG38		3,595	05/19		Suz	<del></del>		<del>                                     </del>	-+		
	AH38		3,609	05/19		_	l <i>et al.</i> nan <i>et al</i> .			-+		
	Also	1 5,90	3,827	100/13	•		ENT DOCUMENTS		<u> </u>		<del></del>	
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	AN	<u>38</u>	Stafford, K.F Vol. SC-9, N	R. <i>et al</i> . o. 6, p	, "A Comple p. 381-387 (l	te Mo Decer	nolithic Sample/Hold Amp nber 1974).	olifier,"	IEEE Jou	urnal d	of Solid-St	ate Circuits, IEEE,
	AO	3 <u>8</u>	Staruk, W. J 211, 213, 21	r. <i>et al</i> 5, 217	., "Pushing F , 220 and 22	IF Da 2 (Ma	ta Rates," <i>Defense Electr</i> y 1985).	ronics,	EW Com	nmunic	cations, Vo	ol. 17, No. 5, pp.
	AP	<u>38</u>	Stephenson, pp. 106-110	A.G., (March	"Digitizing m n 27, 1972).	nultiple	e RF signals requires an c	optimu	m samplii	ng rate	e," <i>Electro</i>	onics, McGraw-Hill,
	AQ	<u>38</u>	Sugarman, F American Ins	R., "Sai	mpling Oscill of Physics, \	loscoj /ol. 28	pe for Statistically Varying 3, No. 11, pp. 933-938 (No	g Pulse ovemb	es," <i>The R</i> er 1957).	Review	v of Scient	tific Instruments,
	AR	<u>38</u>	Sylvain, M., Union, Vol. 2	"Exper 24, No.	imental prob 2, pp. 160-1	ing of 178 (M	multipath microwave cha larch-April 1989).	annels,	" Radio S	Scienc	e, America	an Geophysical
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INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO. 1744.1380000 10/719,058

FIRST NAMED INVENTOR Gregory S. Rawlins

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	AA39 AB39	+-	3,854 5,449	05/19			ouchi <i>et al.</i>				<del> </del>
	AC39	+-	7,149	05/19		Marc		<u> </u>	· · · · · · · · · · · · · · · · · · ·	<u> </u>	
	AD39	1	7,197	05/19		Faull	·				† <del></del>
	AE39	1	1,116	06/19		Noss		1			
	AF39	_	1,123	06/19			fer et al.				
	AG39		4,622	06/19		Inou	<u> </u>				
<del></del>	AH39	+	0,199	07/19	999	Saue	er				
	Al39	-	3,370	08/19		Smit	n				
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	AN	<u>39</u>	(1984).				Detector Operable To K	_			
	AO	<u>39</u>	Tan, M.A., "E Systems- I: I 275 (April 19	undar	ratic Transco nental Theor	onduct y and	ance Switched-Capacito Applications, IEEE Circu	r Filters iits and	," IEEE Tra Systems S	nsactions or ociety, Vol. 4	n Circuits and 10, No. 4, pp. 272-
	AP	<u>39</u>	Tanaka, K. e Electronics,	<i>t al.</i> , "\$ IEEE C	Single Chip N Consumer Ele	Multisy ectron	stem AM Stereo Decode ics Society, Vol. CE-32,	er IC," <i>IE</i> No. 3, p	EEE Transa p. 482-496	actions on Co (August 198	onsumer 36).
	AQ	<u>39</u>	Tawfik, A.N., Electronics L	."Amp .etters,	litude, Durati IEE, Vol. 28	ion an 3, No.	d Predictability of Long H 6, pp. 571-572 (March 12	lop Trar 2, 1992)	ns-Horizon	X-band Sign	als Over the Sea,"
	AR	<u>39</u>	Tawfik, A.N. Meteorologic of the IEE, p	al Par	ameters," <i>Ei</i> g	ghth li	n of Transhorizon Signal nternational Conference o oril 2, 1993).	Level S on Ante	trength wit	h Localized S Propagation,	Surface Electronics Division
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ATTY. DOCKET NO. APPLICATION NO. 1744.1380000 10/719,058

FIRST NAMED INVENTOR Gregory S. Rawlins

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	AA40	4,01	7,798	04/19	977	Gord	y et al.				
	AB40	4,03	2,847	06/19	977	Unka	uf				
	AC40	4,25	3,067	02/19	981	Capl	es et al.		,		
	AD40	4,39	3,395	07/19	983	Hack	e et al.				
	AE40	4,81	6,704	03/19	989	Fiori,	Jr.				
	AF40	4,84	1,265	06/19	989	Wata	inabe et al.				
	AG40		3,974	07/19	990	Mota	medi				
	AH40		5,409	05/19		Step	0			1	
	Al40		3,306	10/19			amoto				
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	AK								,		Yes
	AL										Yes
	AM										Yes
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· .	AN	<u>40</u>	International 4-7, 1989).	Confe	rence on An	tennas	structure of a Transh and Propagation (I	CAP 89) P	art 2: Propag	gation, IEE, p	p. 446-450 (April
	AO	<u>40</u>	Path," Electro	onics L	etters, IEE,	Vol. 20	5, No. 7, pp. 474-47	6 (March 2	9, 1990).	viiciowave 11	anshorizon sea-
	AP	<u>40</u>	Path Loss, D	uration	n of Events,	and Th	anshorizon Measure eir Modeling," <i>IEEE</i> ol. 41, No. 11, pp. 1	Transacti	ons on Anter	nnas and Pro	he Sea- Part 1: pagation, IEEE
	AQ	<u>40</u>	Temes, G.C.	and T	sividis, T., "7 8, pp. 915-91	The Sp 16 (Au	ecial Section on Sw gust 1983).	vitched-Ca <sub>l</sub>	pacitor Circu	its," <i>Proceed</i> i	ings of the IEEE,
	AR	<u>40</u>	Thomas, G.E	3., Calc	culus and An	nalytic	Geometry, Third Edi	ition, Addis	on-Wesley F	Publishing, pp	o. 119-133 (1960).
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## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.

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Gregory S. Rawlins

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·	AA41	+	5,014	05/19	996	Trou	tman			CLASS	
	AB41		3,550	10/19		Toth			-	1	<del></del>
	AC41	+	4,755	11/19		Pers	ico			1	
	AD41		4,592	02/19	997	Kotic	dis et al.				
	AE41	5,63	8,396	06/19	997	Klim	ek				
	AF41	5,67	5,392	10/19	997	Naye	ebi <i>et al</i> .				
	AG41	5,69	4,096	12/19	997	Ushi	roku <i>et al.</i>				
	AH41	5,75	7,870	05/19	998	Miya	et al.			_	
	Al41	5,76	8,323	06/19	998	Kroe	ger et al.			.1	
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	AK		, <u>.</u>								Yes No
	AL										Yes No
•	AM	'									Yes No
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	AN	<u>41</u>					ve Mixer," <i>16<sup>th</sup> European I</i> ber 8-12, 1986).	Microwave	e Confe	rence, Microv	wave Exhibitions
	AO	<u>41</u>	Transactions	on Ul	trasonics, Fe	rroele	r Signal Analysis Based or ectrics, and Frequency Cor lo. 1, pp. 1-3 (January 198	ntrol, IEEE	RF Sai Ultras	mpling Chani onics, Ferroe	nel," <i>IEEE</i> electrics, and
	AP	<u>41</u>	Tsividis, Y. a (1985).	nd Ant	tognetti, P. (E	Ēd.), <i>[</i>	Design of MOS VLSI Circu	its for Tel	ecommi	unications, Pi	rentice-Hall, p. 304
	AQ	41	Tsividis, Y., '				and Analysis of Switched-C gust 1983).	Capacitor	Circuits	," Proceeding	gs of the IEEE,
	AR	41	and 2.6 Ghz	Band I	Radio Comm	unica	Study on a Direct Conversi tion Systems," <i>41<sup>st</sup> IEEE V</i> 7-462 (May 19-22, 1991).	ion Receiv	er Fror Technol	nt-End for 280 ogy Confere	O MHZ, 900 MHZ, nce, IEEE
EXAMINER	_ <del></del>	L	I		<u>.</u> .			DAT	E CON	SIDERED	

ATTY. DOCKET NO.

1744.1380000

FIRST NAMED INVENTOR
Gregory S. Rawlins

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	AA42	5,77	0,985	06/19	998	Ush	niroku <i>et al</i> .			
	AB42	5,77	8,022	07/19	998	Wa	lley			
_	AC42	5,81	2,546	09/19	998	Zho	ou et al.			
	AD42	5,81	8,869	10/19	998	Miy	a et al.			
	AE42	5,84	4,449	12/19	998	Abe	eno <i>et al.</i>			
	AF42	5,87	2,446	02/19	999	Cra	nford, Jr. et al.			
	AG42	5,90	9,447	06/19	999	Cox	c et al.			
	AH42	5,93	3,467	08/19	999	Seh	nier et al.			
	Al42	5,95	2,895	09/19	999	Mc	Cune, Jr. et al.			
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EXAMINER INITIAL		DOG	CUMENT NUM	BER	DATE		COUNTRY	CLASS	SUB- CLASS	TRANSLATION
	AJ									Yes No
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	AN	42	Valdmanis, J Electronic De	.A. et evices,	al., "Picosec " <i>IEDM Tecl</i>	ond a	and Subpicosend Optoelectro I Digest, IEEE, pp. 597-600 (I	onics for Measu December 5-7,	rements of F 1983).	uture High Speed
	AO	<u>42</u>	van de Kamp Letters, IEE,	, M.M Vol. 3	.J.L., "Asymı 4, No. 11, pp	metrio o. 114	c signal level distribution due 15-1146 (May 28, 1998).	to tropospherio	c scintillation,	" Electronics
	AP	<u>42</u>	Vasseur, H. a	and Va etters,	anhoenacker , IEE, Vol. 34	, D., ' 4, No.	"Characterization of troposph 4, pp. 318-319 (February 19	neric turbulent l ), 1998).	ayers from ra	diosonde data,"
	AQ	<u>42</u>	Verdone, R., Environment pp. 1027-103	s," <i>IEE</i>	E Transaction	ons o	alysis for Short-Range Comm in Vehicular Technology, IEE	nunication Syst E Vehicular Te	ems at 60 Gh chnology Soc	z in ATT Urban iety, Vol. 46, No. 4
	AR	<u>42</u>	Vierira-Ribeii Sigma-Delta Services, pp.	Modul	ator, Thesis	for D	T Receiver Architecture using egree of Master's of Enginee	g a Quadrature ering, Carleton	<i>Sub-Samplin</i> University, Ul	g Band-Pass MI Dissertation
EXAMINER		L	1					DATE CON	SIDERED	· · · · · · · · · · · · · · · · · · ·
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## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO. 1744.1380000	APPLICATION NO. 10/719,058
FIRST NAMED INVENTOR Gregory S. Rawlins	
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<del></del> -	AA43	+	0.033	09/19	999	Shiba	ano <i>et al</i> .			102.00	-			
	AB43	+ -	1,073	03/20			dovici et al.			*				
-	AC43	1	4,889	04/20	000	Koba	yashi							
	AD43	6,08	4,922	07/20	000	Zhou	et al.							
-	AE43	6,12	5,271	09/20	000	Rowl	and et al.							
	AF43	6,14	7,340	11/20	000	Levy								
	AG43	6,14	7,763	11/20	000	Stein	lechner				<u> </u>			
	AH43	6,15	0,890	11/20	000	Dam	gaard et al.				<u> </u>			
	Al43	5,12	6,682	06/19	992	Weinberg et al.								
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	AN	<u>43</u>	Vilar, E. et a Internátional 17, 1997).	I., "A C Confe	comprehensiv rence on Ant	/e/Sel tennas	ective MM-Wave Satellite and Propagation, Electro	Downlink nics Divisi	Experin	nent on Fade ie IEE, pp. 2.	Dynamics," <i>Tenth</i> 98-2.101 (April 14-			
	AO	<u>43</u>	Vilar. E. et a	No. 34	46: Characte	ristics	LOS Atmospheric Transm of the Lower Atmosphere	nittance at <i>Influencin</i>	19 Ghz g Radio	:," AGARD C Wave Prop	onference			
	АР	<u>43</u>	Vilar, E. and IEEE Transa	Smith, actions	, H., "A Theo on Antennas	retical s and l	and Experimental Study or Propagation, IEEE, Vol. Al	of Angular P-34, No.	Scintilla 1, pp. 2	ations in Ear -10 (January	th Space Paths," 1986).			
	AQ	<u>43</u>	Vilar, E. et a Antennas an	I., "A W ed Prop	Vide Band Tr pagation, Elec	ansho	rizon Experiment at 11.6 os Division of the IEE, pp.	Ghz," <i>Eigh</i> 441-445 (l	oth Inter March 3	national Con 0- April 2, 19	ference on 993).			
	AR	<u>43</u>	Vilar, E. and 8, No. 20, pp				de Dependence of Freque 72).	ency in Os	cillators	s," Electronic	s Letters, IEE, Vol.			
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ATTY. DOCKET NO. APPLICATION NO. 1744.1380000 10/719,058

FIRST NAMED INVENTOR Gregory S. Rawlins

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	AA44	5,84	1,811	11/19	998	Son	g				
	AB44	4,05	1,475	09/19	977	Can	npbell				
	AC44	5,95	3,642	09/19	999	Felc	tkeller et al.				
	AD44	4,65	3,117	03/19	987	Hec	k				
	AE44	<del></del>	9,878	01/19	999	Phil	ips <i>et al.</i>				_
	AF44		4,496	04/19		Jone				-	<u> </u>
	AG44	<del></del>	5,278	06/19		Mall				-	<u>.</u>
	AH44	+	8,887	02/20		H	rison et al.			+	
	Al44	6,08	1,691	06/20			ard et al.	<u>.</u> l			<u> </u>
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	AL										Yes No
	AM										Yes No
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	AN	44	Vilar, E. et al turbulence,"	., "An e	experimental edings of the	mm- 25 <sup>th</sup> 1	wave receiver system for European Microwave Con	measurin ference, N	g phase lexus Ho	noise due to ouse, pp. 114	atmospheric -119 (1995).
	AO	<u>44</u>	Vilar, E. and Context of Fa No. 9, pp. 13	ade Dy	namics," IEE	E Tr	and Modeling of Time Inte ansactions on Communica 91).	ervals Bet ations, IEE	ween Ra	ain Rate Exce munications \$	eedances in the Society, Vol. 39,
	АР	<u>44</u>					uations in High and Low E lation (ICAP 85), Electron				
	AQ	<u>44</u>					: A Telecommunications S ion to Undergraduates, IE				
	AR	<u>44</u>	Vilar, E. et a Electronics L (April 10, 198	Divisior	RS*. Millimet or Colloquium	re-W on C	ave Beacon Package and ERS- Communications Er	Related F	Payload Resear	Doppler Corr ch Satellite, I	ection Strategies," EE, pp. 10/1-10/10
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FIRST NAMED INVENTOR Gregory S. Rawlins

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	AA45	6,121		09/20	000	Tray	lor				02.100	
· · · · · · · · · · · · · · · · · · ·	AB45	6,144		11/20			et al.					
<del></del> -	AC45	6,144	1,846	11/20	000	Dure	ec					
	AD45	6,175	5,728 B1	01/20	001	Mita	ma					
	AE45	5,705	5,949	01/19	998	Alel	/unas <i>et al</i> .		<u> </u>			
	AF45	5,883	3,548	03/19	999	Ass	ard et al.				ļ	
	AG45	4,484	1,143	11/19	984	$\vdash$	nch et al.		ļ		<u> </u>	
	AH45	5,841	1,324	11/19	998		ams		ļ		<del> </del>	
	Al45	4,855	5,894	08/19			hi et al.					
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	AL											Yes No
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	AN	<u>45</u>	Vilar, E. and Electronics I	Mouls .etters	ley, T.J., "Co , IEE, Vol. 21	omme I, No.	nt and Reply: Probability 14, pp. 620-622 (July 4,	Densit 1985).	y Fun	ction o	f Amplitude S	Scintillations,"
	AO	<u>45</u>	Vilar, E. et a Letters, IEE,	/., "Coi Vol. 2	mparison of F 8, No. 20, pp	Rainfa o. 192	all Rate Duration Distribut 2-1924 (September 24, 1	tions fo 1992).	r ILE-	-IFE an	d Barcelona	," Electronics
	AP	<u>45</u>	Vilar, E., "De No. 9, pp. 73	epolaria 32-733	zation and Fi (April 25, 19	eld Ti 91).	ansmittances in Indoor C	Commu	nicati	ons," E	Electronics Le	etters, IEE, Vol. 27
	AQ	<u>45</u>	Vilar, E. and Paths," <i>Sixtl</i> 150-154 (Ap	n Interr	national Conf	ation erend	Dependence of Amplitude on Antennas and Prop	de Scint agation	tillatio	ons on l P 89) I	Low Elevatio Part 2: Propa	n Earth Space gation, IEE, pp.
	AR	<u>45</u>	Vilar, E. et a European M 1988).	I., "Exp icrowa	perimental Sy ve Conference	ystem ce, M	and Measurements of T icrowave Exhibitions and	ransho I Publis	rizon hers l	Signal Ltd., pp	Levels at 11 o. 429-435 (S	Ghz," <i>18<sup>th</sup></i> september 12 - 15,
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## INFORMATION DISCLOSURE STATEMENT

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FIRST NAMED INVENTOR Gregory S. Rawlins	
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	AA46	5,31	9,799	06/19	994	Мо	rita						
	AB46	1	1,654	09/19	998	Tra	ylor						
	AC46	5,36	9,404	11/19	994	Ga	ton						
	AD46	3,71	6,730	02/19	973	Ce	ny, Jr.						
	AE46	4,08	0,573	03/19	978								
	AF46	4,33	4,324	06/19	982	Но	over						
	AG46	4,36	9,522	01/19	983	Ce	ny, Jr. <i>et al.</i>						
	AH46	5,46	5,418	11/19	995	Zho	ou et al.			<u> </u>			
	Al46	5,51	3,389	04/19	996	Re	eser et al.				<u> </u>		
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	АМ			-							Yes No		
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	AN	<u>46</u>	Vilar, E. and the 4 <sup>th</sup> Europ 1974).	Matthe	ews, P.A., "Ir icrowave Co	mpor infere	tance of Amplitude Scintillence, Microwave Exhibition	ations in I	Millimetric	c Radio Links pp. 202-206	s," <i>Proceedings of</i> (September 10-13,		
	AO	<u>46</u>	Parameters i	n an E	arth-Space I	Path,	nent and Modeling of Scint " IEEE Transactions on Ai o. 4, pp. 340-346 (April 198	ntennas a	ensity to and Propa	Estimate Tur agation, IEEE	bulence Antennas and		
	AP	<u>46</u>	Vilar, E. and Electronics L	Matthe etters,	ews, P.A., "M IEE, Vol. 7,	1eas No.	urement of Phase Fluctuat 18, pp. 566-568 (Septemb	ions on M er 9, 197	lillimetric 1).	Radiowave F	Propagation,"		
	AQ	<u>46</u>	Vilar, E. and Millimetre Ba 5/1-5/8 (Janu	nd," E	lectronics Di	w ar ivisio	nd Wide Band Estimates of In Colloquium on Radiocon	f Field Str nmunicati	ength for	r Indoor Comi e Range 30-6	munications in the 60 Ghz, IEE, pp.		
	AR	Vilar, E. and Faulkner, N.D., "Phase Noise and Frequency Stability Measurements. Numerical Techniques and Limitations," <i>Electronics Division Colloquium on Low Noise Oscillators and Synthesizer,</i> IEE, 5 pages (January 23, 1986).											
EXAMINER	<u>J.                                    </u>		<u> </u>					DA	TE CON	SIDERED			

ATTY. DOCKET NO. APPLICATION NO. 1744.1380000 10/719,058

FIRST NAMED INVENTOR Gregory S. Rawlins

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AB47   5,157,687   10/1992   Tymes	FILING DATE		CLASS		DATE		DOCUMENT DA							
AC47   5,945,660   08/1999   Nakasuji et al.						Lim	99	09/19	9,850	5,959	AA47			
AD47   6,091,939   07/2000   Banh   AE47   6,091,941   07/2000   Moriyama et al.   AF47   6,098,886   08/2000   Swift et al.   AG47   6,215,475 B1   04/2001   Meyerson et al.   AG47   6,215,475 B1   04/2000   Cook et al.   AH47   6,049,706   04/2000   Cook et al.   AH47   6,049,706   04/2000   Sorrells et al.   AH47   6,061,551   05/2000   Sorrells et al.   AH47   AH47   AH47   AH47   AH48   AH49		ļ	<u> </u>	Tymes			08/1999 07/2000		7,687	5,157	AB47			
AE47   6,091,941   07/2000   Moriyama et al.		<del></del>	<u> </u>	<del> </del>		1,939 07/20			AC47					
AF47   6,098,886   08/2000   Swift et al.		<u> </u>							AD47					
AG47 6,215,475 B1 04/2001 Meyerson et al.  AH47 6,049,706 04/2000 Cook et al.  AH47 6,049,706 04/2000 Sorrells et al.  FOREIGN PATENT DOCUMENTS  EXAMINER INITIAL  DOCUMENT NUMBER DATE COUNTRY CLASS SUBCLASS  AJ  AK  AL  AM  OTHER (Including Author, Title, Date, Pertinent Pages, etc.)  AN  47 Vilar, E. and Senin, S., "Propagation phase noise identified using 40 Ghz satellite downlink," Election (Barcelona) and Tropical (Belem) Regions," Tenth International Conference on Antennas and Profile (Barcelona) and Tropical (Belem) Regions," Tenth International Conference on Antennas and Profile (Barcelona) and Tropical (Belem) Regions," Tenth International Conference on Antennas and Profile (Barcelona) and Tropical (Belem) Regions," Tenth International Conference on Antennas and Profile (Barcelona) and Tropical (Belem) Regions," Tenth International Conference on Antennas and Profile (Barcelona) and Tropical (Belem) Regions," Tenth International Conference on Antennas and Profile (Barcelona) and Tropical (Belem) Regions," Tenth International Conference on Antennas and Profile (Barcelona) and Tropical (Belem) Regions," Tenth International Conference on Antennas and Profile (Barcelona) and Tropical (Belem) Regions," Tenth International Conference on Antennas and Profile (Barcelona) and Tropical (Belem) Regions," Tenth International Conference on Antennas and Profile (Barcelona) and Tropical (Belem) Regions," Tenth International Conference on Antennas and Profile (Barcelona) and Tropical (Belem) Regions," Tenth International Conference on Antennas and Profile (Barcelona) and Tropical (Belem) Regions," Tenth International Conference on Antennas and Profile (Barcelona) and Tropical (Belem) Regions," Tenth International Conference on Antennas and Profile (Barcelona) and Tropical (Belem) Regions," Tenth International Conference on Antennas and Profile (Barcelona) and Tropical (Belem) Regions," Tenth International Conference on Antennas and Profile (Barcelona) and Tropical (Belem) Regions," Tenth International Conference on Ante					Moriyama et al.		07/2000				AE47			
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ATTY. DOCKET NO. 1744.1380000 10/719,058

FIRST NAMED INVENTOR Gregory S. Rawlins

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	AD49	1	4,357	05/19							<del>-</del>
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	AH51		8,046	08/20			pper et al.			<del>_</del>	
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EXAMINER INITIAL			CUMENT MBER	DATI	E	NAM	E		CLASS	SUB- CLASS	FILING DATE			
	AA52	5,89	8,912	04/19	999	Heck	cet al.							
	AB52	4,66	0,164	04/19	987	Leibo	owitz				1			
	AC52	6,58	0,902 B1	06/20	003	Sorre	ells et al.							
	AD52	4,85	7,928	08/19	989									
	AE52	5,38	9,839	02/19	995	Heck								
	AF52	5,47	1,665	11/19	995	Pace	e et al.							
	AG52	6,32	7,313 B1	12/20	001	Tray	or et al.				Ì			
	AH52	1	1,154	05/19	998	Tsug								
	Al52	1	3,817	08/19	998	Wilson								
		1 -1	315.11				ENT DOCUMENTS		<u> </u>	<u> </u>	•			
EXAMINER INITIAL		DOC	CUMENT NUME	BER	DATE		COUNTRY		CLASS	SUB- CLASS	TRANSLATION			
	AJ										Yes No			
	AK										Yes			
	AL					•	,			<del> </del>	No Yes			
	AM									<u> </u>	No Yes			
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	AN	<u>52</u>		and C		- "	itle, Date, Pertinent Pa			, Prentice-Ha	II, Inc., pp. v-xii and			
	AO	<u>52</u>	English-langu Pages (Febru	ıage A ıary 2,	bstract of Ja 1996 - Date	apanes e of pui	se Patent Publication No blication of application).	o. 08-03	32556, from	http://www1.i	pdl.jpo.go.jp, 2			
·	АР	<u>52</u>	English-langu Pages (May 3	iage A 31, 199	bstract of Ja 96 - Date of	apanes publica	se Patent Publication No ation of application).	o. 08-13	39524, from	http://www1.i	pdl.jpo.go.jp, 2			
	Q	English-language Abstract of Japanese Patent Publication No. 59-144249, from http://www1.ipdl.jpo.go.jp, 2 Pages (August 18, 1984 - Date of publication of application).												
	AR	<u>52</u>	English-langu Pages (Marcl	e Patent Publication No cation of application).	o. 63-05	54002, from	http://www1.i	pdl.jpo.go.jp, 2						
EXAMINER	_1	L	<b>!</b> ,						DATE CON	SIDERED				

ATTY. DOCKET NO. APPLICATION NO. 1744.1380000 10/719,058

FIRST NAMED INVENTOR Gregory S. Rawlins

FILING DATE GROUP

	I	FORM	PTO-1449			FIRST NAMED INVENTOR Gregory S. Rawlins							
INE	FORMATIO	N DIS	CLOSURE STA	ATEME!	<u>NT</u>	FILING DATE November 24, 2003  GROUP To Be Assigned							
					U.S. P.	ATEN	IT DOCUMENTS						
EXAMINER INITIAL			CUMENT MBER	DATI	E	NAN	/E	CLASS	SUB- CLASS	FILING DATE			
	AA53	6,22	25,848 B1	05/20	001	Tille	y et al.						
-	AB53	6,31	3,685 B1	11/20	001	Rab	ii						
	AC53	3,61	4,627	10/19	971	Run	yan <i>et al</i> .			<u> </u>			
	AD53	3,94	10,697	02/19					_				
	AE53	_	6,366	04/19		Kura							
	AF53	_	15,740	08/19		Bak	<del></del>						
	AG53	$\overline{}$	5,737	09/19			gu et al.			<del>-</del>			
	AH53	1	0,992	01/19		<del> </del>	ada et al.						
	AI53	5,79	90,587	08/19		Smith et al.							
		_			FOREIGN	PAT	ENT DOCUMENTS		<del></del>	1			
EXAMINER INITIAL		DOG	CUMENT NUM	BER	DATE		COUNTRY	CLASS	SUB- CLASS	TRANSLATION			
	AJ									Yes			
	AK									No Yes			
	AL	<b>-</b>	-							No Yes			
	AM									No Yes			
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	AN	<u>53</u>	English-lang	uage A	bstract of Ja	apane	se Patent Publication No. 06 blication of application).		m http://www1.i	ipdl.jpo.go.jp, 2			
,	AO	<u>53</u>					se Patent Publication No. 08 ublication of application).	3-023359, fro	m <i>http://www1</i>	ipdl.jpo.go.jp, 2			
	AP	<u>53</u>	Translation of application).	of Japa	nese Patent	Publi	cation No. 47-2314, 7 pages	(February 4	, 1972- Date of	publication of			
	AQ	<u>53</u>	Partial Trans of application		of Japanese	panese Patent Publication No. 58-7903, 3 pages (January 17, 1983- Date of publication							
	AR	<u>53</u>	English-lang Pages (Augu	uage A ıst 8, 1	Abstract of Ja	Japanese Patent Publication No. 58-133004, from http://www1.ipdl.jpo.go.jp, 2 of publication of application).							
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### INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO. 1744.1380000	APPLICATION NO. 10/719,058
FIRST NAMED INVENTOR Gregory S. Rawlins	
FILING DATE	GROUP

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EXAMINER INITIAL			DOCUMENT DATE NUMBER		E	NAM	E		CLASS	SUB- CLASS	FILING DATE
	AA54	4,74	10,675	04/1	988	Bros	nan <i>et al</i> .				
	AB54	5,48	3,600	01/1	996	Werr	bach				
	AC54	6,01	1,435	01/2	000	Take	yabu et al.				
	AD54	6,32	21,073 B1	11/2	001	Luz	et al.				
	AE54	6,02	26,286	02/2	000	Long					
	AF54	6,17	'8,319 B1	01/2	001	Kash	ima				
	AG54	6,63	34,555 B1	10/2	003	Sorre	ells et al.				
	AH54	3,73	6,513	05/19	973	Wilse	on				
	AI54	4,48	88,119	12/1	984	Mars	hall				
					FOREIGN	N PAT	ENT DOCUMENTS			•	
EXAMINER INITIAL		DOG	CUMENT NUM	BER	DATE		COUNTRY		CLASS	SUB- CLASS	TRANSLATION
-	AJ										Yes
	AK										Yes
	AL				· · · · · ·						Yes
	AM										Yes
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	AN	<u>54</u>	Pages (April	4, 198	5 - Date of p	oublica	te Patent Publication Nation of application).				
	AO	<u>54</u>	Pages (April	uage A 23, 19	bstract of Ja 92 - Date of	public	e Patent Publication Nation of application).	lo. 04-12	23614, from <i>l</i>	http://www1.ip	odl.jpo.go.jp, 2 
	AP	<u>54</u>					e Patent Publication Nation of application).	lo. 04-12	27601, from <i>l</i>	http://www1.ip	odl.jpo.go.jp, 2
	AQ	<u>54</u>	English-langi Pages (July	uage A	bstract of Ja 33 - Date of	apanes publica	e Patent Publication Nation of application).	lo. 05-17	75730, from <i>l</i>	http://www1.ip	odl.jpo.go.jp, 2
	AR	<u>54</u>	English-lange Pages (July	uage A 13, 199	bstract of Ja 33 - Date of	apanes publica	e Patent Publication Nation of application).	lo. 05-17	75734, from <i>l</i>	http://www1.ip	odl.jpo.go.jp, 2
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November 24, 2003

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ATTY. DOCKET NO. APPLICATION NO. 1744.1380000 10/719,058 FIRST NAMED INVENTOR Gregory S. Rawlins

INFO	ORMATIO	N DIS	CLOSURE STA	TEME	VТ	G:	regory S. Rawlins				
							ILING DATE		GROU		,
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EXAMINER INITIAL			UMENT BER	DATE	Ξ	NAN	ME		CLASS	SUB- CLASS	FILING DATE
	AA55	4,63	3,510	12/19	986	Suz	uki <i>et al</i> .				
	AB55	5,36	9,789	11/19	994	Kos	ugi et al.				
	AC55	5,41	6,449	05/19	95 Joshi						
	AD55	5,43	8,329	08/19	995	995 Gastouniotis et al.					
	AE55	6,61	1,569 B1	08/20	OO3 Schier et al.						
	AF55	6,64	7,250 B1	11/20	003	Bult	man <i>et al.</i>				
	AG55	5,68	2,099	10/19	997 Thompson et al.						
	AH55	6,09	4,084	07/20	7/2000 Abou-Allam et al.						
	AI55	6,06	7,329	05/20	000	Kato	o et al.				
					FOREIGN	PAT	TENT DOCUMENTS				
EXAMINER INITIAL		DOC	UMENT NUM	BER	DATE		COUNTRY		CLASS	SUB- CLASS	TRANSLATION
	AJ										Yes No
	AK										Yes No
	AL										Yes No
	АМ	<u> </u>			<u> </u>					-	Yes No
		<u> </u>	OTH	FR (In	cluding Autl	nor '	Title, Date, Pertinent Pag	es. etc	C-)		
	AN	<u>55</u>	English-lang Pages (June	uage A 16, 19	bstract of Ja 195 - Date of	pane publi	ese Patent Publication No. cation of application).	07-154	4344, from <i>i</i>	http://www1.i <sub>l</sub>	pdl.jpo.go.jp, 2
	AO	<u>55</u>	English-lang Pages (Nove	uage A ember 2	bstract of Ja 21, 1995 - Da	pane ate of	ese Patent Publication No. f publication of application)	07-30 <sup>.</sup>	7620, from <i>i</i>	http://www1.i <sub>j</sub>	pdl.jpo.go.jp, 2
	AP	<u>55</u>	Oppenheim, 136-165 (197		nd Schafer, I	R.W.,	, Digital Signal Processing,	, Pren	tice-Hall, pp	. vii-x, 6-35,	45-78, 87-121 and
	AQ	<u>55</u>	English-lang Pages (May	uage A 19, 19	bstract of Ja 80 - Date of p	pane	ese Patent Publication No. cation of application).	55-06	6057, from <i>i</i>	http://www1.i	pdl.jpo.go.jp, 2
	AR	<u>55</u>	English-lang Pages (Marc	uage A h 24, 1	bstract of Ja	of Japanese Patent Publication No. 63-065587, from http://www1.ipdl.jpo.go.jp, 2 ate of publication of application).					
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# INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.

1744.1380000

FIRST NAMED INVENTOR
Gregory S. Rawlins

FILING DATE

APPLICATION NO.

10/719,058

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INF	ORMATIO	N DISC	CLOSURE ST	ATEMEI	NT	G	regory S. Rawlins	,		·	<del></del>
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EXAMINER INITIAL			UMENT IBER	DATI	Ξ	NAI	ME	CL	ASS	SUB- CLASS	FILING DATE
	AA56	6,516	6,185 <b>B</b> 1	02/20	003	Ма	cNally				
	AB56	6,608	8,647 B1	08/20	003	Kin	g				
	AC56	6,687	7,493 B1	02/20	004	Sor	rells et al.	_		<u> </u>	
	AD56	6,694	4,128 B1	02/20	004	Sor	rells et al.			ļ	
	AE56	6,03°	1,217	02/20	000	Asv	vell et al.			ļ	
	AF56		5,992	09/19							
	AG56	5,999	9,561	12/19		Naden et al.					
	AH56	6,686	6,879 B2	02/20	004	Shattil				<u> </u>	
	AI56	6,704	4,549 B1	03/20	004	Sor	rells et al.			<u> </u>	
					FOREIGN	I PA	TENT DOCUMENTS				
EXAMINER INITIAL		DOC	UMENT NUM	BER	DATE		COUNTRY	CL	ASS	SUB- CLASS	TRANSLATION
	AJ										Yes
	AK										No Yes
				<del></del>							No.
	AL								•		Yes No
	AM										Yes No
		<u> </u>	ОТН	ER (In	cludina Aut	hor.	Title, Date, Pertinent Pages	s. etc.)			<u> </u>
	AN	<u>56</u>	Pages (June	27, 19	988 - Date of	publ	ese Patent Publication No. 63 ication of application).				<del></del>
	AO	<u>56</u>	application).	л Јара	nese ratent		ication No. 60-130203, 3 pag	jes (July		Date of p	ublication of .
	AP	<u>56</u>					IOS Transmitter for Dual-Ban p. 128-131 (1998).	nd Applica	ations,"	Symposium	on VLSI Circuits
	AQ	<u>56</u>	Ritter, G.M., Exhibitions a	"SDA, ind Put	A New Solution	tion f 729-	for Transceivers," <i>16th Europ</i> 733 (September 8, 1986).	ean Micr	owave	Conference,	Microwave
	AR	<u>56</u>	DIALOG File Date of publi				glish Language Patent Abstra	act for FF	₹ 2 669	787, 1 page	(May 29, 1992-
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ATTY. DOCKET NO. APPLICATION NO. 10/719,058 1744.1380000 FIRST NAMED INVENTOR Gregory S. Rawlins

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	AA57	6,70	4,558 B1	03/20	004	Sorre	ells et al.							
,,	AB57	1	0,176	02/19	996	Peltie	er							
	AC57		0,053	10/19	999	Schio	ck et al.							
	AD57		8,630	06/20	000	0 Prasanna								
	AE57	1	0,911 B1	07/20		03 Morishige et al.								
	AF57	5.17	9,731	01/19	993									
	AG57	1	9,793	12/19		<del></del>	apian							
	AH57	<del></del>	0,467	04/19		<del>                                     </del>	g et al.							
	AI57		2,853	09/19	-	Hart								
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	AJ										Yes No			
··· -	AK										Yes No			
	AL										Yes No			
	АМ										Yes No			
			ОТН	ER (In	cludina Aut	hor. T	itle, Date, Pertinent Pa	ges, etc.)						
	AN ·	<u>57</u>	Akos, D.M. e Communicat	et al., "[ ions, le	Direct Bandp EEE, Vol. 47	ass S , No. 7	ampling of Multiple Disti , pp. 983-988 (July 1999	nct RF Sig 9).	gnals," <i>IE</i>	EE Transacti	ions on			
·	AO	<u>57</u>	Patel, M. et a Jitter," VTC	<i>al.</i> , "Ва 2002, I	ndpass Sam EEE, pp. 190	npling 1 01-190	or Software Radio Rece 5 (2002).	eivers, and	I the Effe	ct of Oversan	npling on Aperture			
	AP	<u>57</u>	English-lang Pages (Febr	uage A uary 13	bstract of Ja 3, 1986- Date	apanes e of pu	e Patent Publication No blication of application).	o. 61-0308	21, from	http://www1.i	pdl.jpo.go.jp, 2			
	AQ	<u>57</u>	English-lang Pages (Dece	uage A ember	bstract of Ja	apanes ate of	e Patent Publication No publication of application	o. 05-3273 n).	56, from	http://www1.i	pdl.jpo.go.jp, 2			
	AR	<u>57</u>				High-performance Zero IF Quadrature Detector/Preamplifier," <i>RF Design</i> , Primedia, Inc., pp. 58, 60, 62 and 69 (March 2003).					esign, Primedia			
EXAMINER	<u>i</u>	<u> </u>	<u> </u>		<del></del>			DA	TE CON	SIDERED				

ATTY. DOCKET NO. APPLICATION NO. 10/719,058 1744.1380000 FIRST NAMED INVENTOR Gregory S. Rawlins

INF	ORMATIO	N DIS	CLOSURE STA	TEME	NT	Gregory S. Rawlins						
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EXAMINER	T	T								T		
INITIAL			DUMENT MBER	DATI		NAM	E		CLASS	SUB- CLASS	FILING DATE	
	AA58	4,97	2,436	11/19	990	Halin	n et al.		<u> </u>			
	AB58	5,01	2,245	04/19	991	Scott	et al.					
	AC58	5,42	2,909	06/19	Love et al.						<u>.</u>	
	AD58	5,44	0,311	08/19	995	Gallagher et al.						
	AE58	5,92	6,513	07/19	999	Suon	ninen et al.					
	AF58	5,99	5,030	11/19	999	Cabl	er					
	AG58	6,04	7,026	04/20	000	Chao et al.						
	AH58	6,04	9,573	04/20	4/2000 Song							
	AI58	6,07	6,015	06/20	000	Harti	ey et al.					
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EXAMINER INITIAL		DOG	CUMENT NUM	BER	DATE		COUNTRY		CLASS	SUB- CLASS	TRANSLATION	
	AJ										Yes No	
·	AK										Yes No	
	AL					·					Yes No	
	AM .	<del>-  </del>									Yes No	
			OTH	FR (In	cluding Aut	hor T	itle, Date, Pertinent Pa	nes et	ic.)			
	AN	<u>58</u>	Journal of Se	electea	Topics in Q	uantur	onic Receiver Based on in Electronics, IEEE, Vol	. 2, No	. 1, pp. 117-	120 (April 19	96).	
	AO	<u>58</u>					. 879-883 (September 1					
	АР	<u>58</u>	Stewart, R.W Communicat	/. and ion En	Pfann, E., "C gineering Joi	Oversa urnal,	mpling and sigma-delta IEEE, pp. 37-47 (Februa	strateg ary 199	ies for data 8).	conversion,"	Electronics &	
	AQ	<u>58</u>	Rudell, J.C. Applications,	et al., " " IEEE	"A 1.9-Ghz Wide-Band IF Double Conversion CMOS Receiver for Cordless Telephone E Journal of Solid-State Circuits, IEEE, Vol. 32, No. 12, pp. 2071-2088 (December 1997).							
	AR	<u>58</u>					e Patent Publication No blication of application).	. 09-03	36664, from <i>i</i>	http://www1.ij	odl.jpo.go.jp, 2	
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ATTY. DOCKET NO. 1744.1380000	APPLICATION NO. 10/719,058
FIRST NAMED INVENTOR Gregory S. Rawlins	
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	AA59	6,144	4,331	11/20	000	Jiang	•				
	AB59	6,018	3,553	01/20	000	Sanie	elevici <i>et al.</i>				
· · · · · · · · · · · · · · · · · · ·	AC59	6,317	7,589 B1	11/20	001	Nash	l				
	AD59	5,058	3,107	10/19	91	Stone	e et al.				
	AE59	5,757	7,858	05/19	98	Black	c et al.				
	AF59	6,53	1,979 B1	03/20	003	Hyne	s				
	AG59	6,018	3,262	01/20	Noro et al.						<u>-</u>
	AH59	4,76	1,798	98 08/1988		Grisowld, Jr. et al.					
	AI59	5,982	2,315			Bazarjani et al.					
					FOREIGN	PATE	ENT DOCUMENTS				_
EXAMINER INITIAL		DOC	UMENT NUM	BER	DATE		COUNTRY	CL	ASS	SUB- CLASS	TRANSLATION
	AJ										Yes No
	AK										Yes No.
	AL					٠					Yes No
	AM										Yes No
			ОТНІ	ER (Inc	cluding Aut	hor, T	itle, Date, Pertinent Pa	ges, etc.)			
	AN	<u>59</u>	Simoni, A. et Solid-State C	al., "A Circtuits	Single-Chip s, IEEE, Vol.	Optica 30, No	al Sensor with Analog M o. 7, pp. 800-806 (July 1	lemory for N 995).	fotion D	etection," IE	EEE Journal of
	AO	<u>59</u>	English Tran	slation	of German I	Patent	Publication No. DE 196	48 915 A1,	10 page	<del>9</del> s.	
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ATTY. DOCKET NO. 1744.1380000	APPLICATION NO. 10/719,058
FIRST NAMED INVENTOR Gregory S. Rawlins	
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EXAMINER INITIAL		DOCUMENT NUMBER	DAT	E	NAM	E	CLASS	SUB- CLASS	FILING DATE		
	AA60	6,459,721 B1	10/20	002	Moch	nizuki e <i>t al.</i>					
	AB60	6,151,354	11/20	000	Abbe	y					
	AC60	6,169,733 B1	01/20	001	Lee						
	AD60	6,363,262 B1	03/20	002	McNi	icol					
	AE60	6,697,603 B1	02/20	004	Lovin	nggood et al.					
	AF60	5,282,222	01/19	994	Fatto	uche <i>et al.</i>					
	AG60	5,949,827	09/19	999	DeLu	ıca et al.					
	AH60	6,014,176	01/20	000	Naye	ebi <i>et al</i> .					
	AI60	5,678,226	10/19	997	Li et						
				FOREIG	N PATI	ENT DOCUMENTS					
EXAMINER INITIAL		DOCUMENT NUM	IBER	DATE		COUNTRY	CLASS	SUB- CLASS	TRANSLATION		
	AJ								Yes No		
	AK								Yes No		
, , , , ,	AL								Yes No		
	AM								Yes No		
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# INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO. 1744.1380000	APPLICATION NO. 10/719,058
FIRST NAMED INVENTOR Gregory S. Rawlins	
FILING DATE	GROUP

						vember 24, 2003		TO B	e Assigned	
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EXAMINER INITIAL		DOCUMENT NUMBER	DATI				CL	ASS	SUB- CLASS	FILING DATE
	AA61	5,760,632	06/19	998	Kawa	akami <i>et al</i> .				
	AB61	6,160,280	12/20	000	Bonn	et al.				
	AC61	5,481,570	01/19	996	Winte	ers				
	AD61	5,745,846	04/19	998	Myer	et al.				
<b></b>	AE61	5,345,239	09/19	994	Madr	ni et al.				
	AF61	4,132,952	01/19	979	Hong	ju <i>et al.</i>				
	AG61	5,260,973	_		Wata	nabe			<b></b>	
	AH61	6,307,894 B2	+		+					
	Al61	6,091,289	07/20	000	Song	et al.				
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EXAMINER INITIAL		DOCUMENT NUM	MBER	DATE		COUNTRY	CL	ASS	SUB- CLASS	TRANSLATION
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EXAMINER INITIAL  AA  AE  AC  AC  AC  AC  AC  AC  AC  AC	A62 6 B62 2 C62 4 D62 4 E62 5 F62 5 G62 6	DOCUMENT NUMBER 6,437,639 B1 2002/0037706 A1 4,441,080 4,873,492 5,697,074 5,784,689 6,335,656 B1 6,690,232 B2 5,636,140	08/20 03/20 04/19 10/19 12/19 07/19 01/20 02/20 06/19	U.S. P  002 002 002 084 089 097	NAME NAME Nguya Ichiha Saari Myer	en <i>et al.</i> ara	CLASS	SUB-CLASS	FILING DATE
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INITIAL  AA  AC  AC  AC  AC  AC  AC  AC  AC	A62 6 B62 2 C62 4 D62 4 E62 5 F62 5 G62 6	NUMBER 6,437,639 B1 2002/0037706 A1 4,441,080 4,873,492 5,697,074 5,784,689 6,335,656 B1 6,690,232 B2	08/20 03/20 04/19 10/19 12/19 07/19 01/20 02/20	002 002 984 989 997	Nguyo Ichiha Saari Myer	en <i>et al.</i> ara	CLASS		FILING DATE
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ATTY. DOCKET NO. 1744.1380000	APPLICATION NO. 10/719,058
FIRST NAMED INVENTOR Gregory S. Rawlins	
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A	A63	6,366,622 B1	04/20	002	Brov	vn et al.			
AI	B63	6,600,795 B1	07/20	003	Ohta	et al.			
A	C63	4,250,458	02/19	981	Rich	mond et al.			
Αſ	D63	5,760,629	06/19	98	Ural	oe et al.	ļ		
Af	E63	6,084,465	07/20	000	Das	qupta	<u> </u>		
A	F63	6,204,789 B1	03/20	001	Nag		-	_	<u> </u>
A	G63	6,064,054	05/20			czynski <i>et al</i>			_
	H63	5,218,562	06/19		-	ehore et al.	<u> </u>		
Al	163	5,239,496	08/19		_	craeynest			
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# INFORMATION DISCLOSURE STATEMENT

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EXAMINER INITIAL		DOCUMENT NUMBER	DOCUMENT DATE NUMBER		NAM	NAME		CLASS	SUB- CLASS	FILING DATE
	AA64	5,896,304	04/19	999	Tiem	ann <i>et al</i> .				_
	AB64	6,005,903	12/1	999	Meno	felovicz			-	
	AC64	5,834,979	11/19	998	Yatsı	uka				
	AD64	6,798,351 B1	09/2	004	Sorre	ells et al.				
	AE64	6,813,485 B2	11/2	004	Sorre	ells et al.				
	AF64	5,410,270	04/1	995	Rybio	cki <i>et al</i> .				
	AG64	6,509,777 B2	01/2	003	Raza	vi et al.				
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EXAMINER INITIAL		DOCUMENT NUM	MBER	DATE		COUNTRY		CLASS	SUB- CLASS	TRANSLATION
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